

## SEQUENCE LISTING

<110> diaDexus, Inc.  
 Macina, Roberto  
 Turner, Leah  
 Sun, Yongming  
 Rodriguez, Maria  
 Tim Burcham  
 <120> Compositions, Splice Variants and Methods Relating to Colon  
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&lt;211&gt; 480

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

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&lt;213&gt; Homo sapien

&lt;400&gt; 28

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<210> 34
<211> 1683
<212> DNA
<213> Homo sapien

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<210> 35
<211> 2040
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

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&lt;223&gt; n=a, c, g or t

&lt;400&gt; 35

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<210> 36

<211> 1912

<212> DNA

<213> Homo sapien

<400> 36

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<210> 37  
<211> 1797  
<212> DNA  
<213> Homo sapien

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<210> 38  
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 <212> DNA  
 <213> Homo sapien

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<210> 39
<211> 2372
<212> DNA
<213> Homo sapien

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&lt;210&gt; 40

&lt;211&gt; 5075



&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 40

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&lt;210&gt; 45

&lt;211&gt; 919

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 45

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 <213> Homo sapien

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<213> Homo sapien

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<212> DNA  
<213> Homo sapien

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&lt;210&gt; 56

&lt;211&gt; 1001

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 56

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<212> DNA
<213> Homo sapien

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 <213> Homo sapien

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&lt;210&gt; 68

&lt;211&gt; 2081

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 68

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<210> 69  
<211> 845  
<212> DNA  
<213> Homo sapien

<400> 69  
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actta 845

<210> 70  
<211> 853  
<212> DNA  
<213> Homo sapien

<400> 70  
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gagactccgt ctc                                     853

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<210> 71
<211> 853
<212> DNA
<213> Homo sapien

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<400> 71
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caaaagcaaa caacagggca gcagaagaag cctttgtaaa tgacattgac gagtgcgtccc    660
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<210> 72  
<211> 1666  
<212> DNA  
<213> Homo sapien

<400> 72  
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tgtcatcaca ccgggcgttc aattctaaaa aaaaattata tagaga 1666

<210> 73

<211> 1542

<212> DNA

<213> Homo sapien

<400> 73

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<210> 74  
<211> 1958  
<212> DNA  
<213> Homo sapien

<400> 74  
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caccgggcgt tcaattctaa aaaaaatta tatagaga 1958

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<210> 75
<211> 1233
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1232)..(1232)
<223> n=a, c, g or t

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<400> 75
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<210> 76  
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<212> DNA

<213> Homo sapien

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&lt;212&gt; DNA

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&lt;400&gt; 84

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<212> DNA
<213> Homo sapien

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&lt;211&gt; 1594

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 87

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caggcgaggc cagggacatg gccatggacc tgtgtcggca ggaccccgag tgtgagttct 180

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tntggggcgn cctgagcncc gatgagtact acgcccgtc ngnggactan gtggagctgg      360
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gagcgtacaa gcaacgcgca gcctggatca tccattctt ctgttaccag atctttgact      600
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tgattagctg tgtttggaac tgctaccgat acatcaatgg taggaactcc tctgatgtcc 840  
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gccaccactt acagctcgtc cccacacagt gctgccacag caggctgacg caggtcctcc 180  
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Ala Glu Gly Val Ala Ala Pro Ala Asp Pro Glu Met Val Thr Leu Pro  
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Leu Gln Pro Ser Ser Thr Met Gly Gln Val Gly Arg Gln Leu Ala Ile  
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Ile Gly Asp Asp Ile Asn Arg Arg Tyr Asp Ser Glu Phe Gln Thr Met  
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Leu Gln His Leu Gln Pro Thr Ala Glu Asn Ala Tyr Glu Tyr Phe Thr  
100 105 110

Lys Ile Ala Thr Ser Leu Phe Glu Ser Gly Ile Asn Trp Gly Arg Val  
115 120 125

Val Ala Leu Leu Gly Phe Gly Tyr Arg Leu Ala Leu His Val Tyr Gln  
130 135 140

His Gly Leu Thr Gly Phe Leu Gly Gln Val Thr Arg Phe Val Val Asp  
145 150 155 160

Phe Met Leu His His Cys Ile Ala Arg Trp Ile Ala Gln Arg Gly Gly  
165 170 175

Trp Val Ser Ile Gln Gly Leu Gln Cys Pro Pro Cys Cys Trp Gly Cys  
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<211> 225

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Pro Gly Asp Pro Leu Arg Gly Arg Leu His Ala Ala Ser Leu His Cys  
 35 40 45

Pro Val Asp Cys Thr Glu Gly Trp Leu Gly Glu Tyr Pro Arg Thr Ala  
 50 55 60

Met Ser Ser Leu Leu Leu Gly Leu Pro Leu Ser Gln Ala Pro Pro Leu  
 65 70 75 80

Pro Arg Val Pro Ile Ser Ser Ala Ser Leu Ser Val Thr Thr Leu Phe  
 85 90 95

Leu Pro Ala Gly Gly Ser Pro Glu Leu Gly Gln Trp Ser His Pro Glu  
 100 105 110

Arg Ala Gly Gly Ser Gly Cys Gly Ser Val Gly Pro Val Cys Gly Thr  
 115 120 125

Lys Ile Leu Gln Ile Met Thr Pro Lys Gly Ala Leu Trp Gly Pro Gly  
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Ser Asp Pro Cys Leu Asp Leu Ser Glu Val Phe Ala Phe Ser Ala Pro  
 145 150 155 160

Leu Gln Gly Ser Pro Leu Lys Ser Thr Glu Ala Leu Ala Ser Val His  
 165 170 175

Ser Ser Phe Gly Gly Pro Leu Arg Gly Gly Gln Ser Gly Cys Arg Gly  
 180 185 190

Thr Ser Thr Leu His Gly Ala Ser Gly Pro Ser Leu Trp Ala Gln Gly  
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Leu Trp Pro Ser Pro Pro Ser Ala Leu Trp Asp Leu Leu Ser Pro Val  
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Cys  
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Arg Ile Pro Glu Pro Trp Ile Thr Pro Pro Asp Leu Gln Glu Lys Ile  
 35 40 45

His Ile Phe Ala Gln Lys Cys Leu Phe Leu Thr Glu Ser Leu Lys Gln  
 50 55 60

Phe Thr Glu Lys Met Gln Ser Asp Met Glu Lys Ile Gln Glu Leu Arg  
 65 70 75 80

Glu Ala Gln Leu Tyr Ser Val Asp Val Thr Leu Asp Pro Asp Thr Ala  
 85 90 95

Tyr Pro Ser Leu Ile Leu Ser Asp Asn Leu Arg Gln Val Arg Tyr Ser  
 100 105 110

Tyr Leu Gln Gln Asp Leu Pro Asp Asn Pro Glu Arg Phe Asn Leu Phe  
 115 120 125

Pro Cys Val Leu Gly Ser Pro Cys Phe Ile Ala Gly Arg His Tyr Trp  
 130 135 140

Glu Val Glu Val Gly Asp Lys Ala Lys Trp Thr Ile Gly Val Cys Glu  
 145 150 155 160

Asp Ser Val Cys Arg Lys Gly Gly Val Thr Ser Ala Pro Gln Asn Gly  
 165 170 175

Phe Trp Ala Val Ser Leu Trp Tyr Gly Lys Glu Tyr Trp Ala Leu Thr  
 180 185 190

Ser Pro Met Thr Ala Leu Pro Leu Arg Thr Pro Leu Gln Arg Val Gly  
 195 200 205

Ile Phe Leu Asp Tyr Asp Ala Gly Glu Val Ser Phe Tyr Asn Val Thr

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210                      215                      220  
 Glu Arg Cys His Thr Phe Thr Phe Ser His Ala Thr Phe Cys Gly Pro  
 225                      230                      235                      240  
 Val Arg Pro Tyr Phe Ser Leu Ser Tyr Ser Gly Gly Lys Ser Ala Ala  
                     245                      250                      255  
 Pro Leu Ile Ile Cys Pro Met Ser Gly Ile Asp Gly Phe Ser Gly His  
                     260                      265                      270  
 Val Gly Asn His Gly His Ser Met Glu Thr Ser Pro  
                     275                      280  
  
 <210> 98  
 <211> 321  
 <212> PRT  
 <213> Homo sapien  
  
 <400> 98  
 Lys His Lys Ile Ser Trp Val Trp Trp Arg Met Pro Val Ile Pro Ala  
 1                      5                      10                      15  
 Thr Gln Glu Ala Glu Ala Gly Glu Ser Leu Glu Pro Gly Arg Gln Arg  
                     20                      25                      30  
 Leu Arg Trp Ala Glu Met Ala Pro Leu His Ser Ser Leu Gly Asn Lys  
                     35                      40                      45  
 Arg Asn Ser Ile Ser Lys Lys Lys Lys Ile Tyr Ser Cys Phe Leu Asn  
                     50                      55                      60  
 Leu Ala Glu Arg Ile Arg Ile Pro Glu Pro Trp Ile Thr Pro Pro Asp  
 65                      70                      75                      80  
 Leu Gln Glu Lys Ile His Ile Phe Ala Gln Lys Cys Leu Phe Leu Thr  
                     85                      90                      95  
 Glu Ser Leu Lys Gln Phe Thr Glu Lys Met Gln Ser Asp Met Glu Lys  
                     100                      105                      110  
 Ile Gln Glu Leu Arg Glu Ala Gln Leu Tyr Ser Val Asp Val Thr Leu  
                     115                      120                      125  
 Asp Pro Asp Thr Ala Tyr Pro Ser Leu Ile Leu Ser Asp Asn Leu Arg  
                     130                      135                      140

Gln Val Arg Tyr Ser Tyr Leu Gln Gln Asp Leu Pro Asp Asn Pro Glu  
145 150 155 160

Arg Phe Asn Leu Phe Pro Cys Val Leu Gly Ser Pro Cys Phe Ile Ala  
165 170 175

Gly Arg His Tyr Trp Glu Val Glu Val Gly Asp Lys Ala Lys Trp Thr  
180 185 190

Ile Gly Val Cys Glu Asp Ser Val Cys Arg Lys Gly Gly Val Thr Ser  
195 200 205

Ala Pro Gln Asn Gly Phe Trp Ala Val Ser Leu Trp Tyr Gly Lys Glu  
210 215 220

Tyr Trp Ala Leu Thr Ser Pro Met Thr Ala Leu Pro Leu Arg Thr Pro  
225 230 235 240

Leu Gln Arg Val Gly Ile Phe Leu Asp Tyr Asp Ala Gly Glu Val Ser  
245 250 255

Phe Tyr Asn Val Thr Glu Arg Cys His Thr Phe Thr Phe Ser His Ala  
260 265 270

Thr Phe Cys Gly Pro Val Arg Pro Tyr Phe Ser Leu Ser Tyr Ser Gly  
275 280 285

Gly Lys Ser Ala Ala Pro Leu Ile Ile Cys Pro Met Ser Gly Ile Asp  
290 295 300

Gly Phe Ser Gly His Val Gly Asn His Gly His Ser Met Glu Thr Ser  
305 310 315 320

Pro

<210> 99  
<211> 50  
<212> PRT  
<213> Homo sapien

<400> 99

Thr Ile Tyr Gly Pro Lys Val Ala Lys Ile Leu Arg Ala Ser Val Glu  
1 5 10 15

Leu Leu Asp Glu Met Lys Phe Ser Leu Glu Lys Leu His Gln Gly Ile

20 25 30  
 Thr Val Ser Asp Pro Pro Phe Asp Thr Gln Pro Arg Pro Asp Asp Ser  
 35 40 45  
 Phe Ser  
 50  
 <210> 100  
 <211> 121  
 <212> PRT  
 <213> Homo sapien  
 <400> 100  
 Ser Ser Arg Trp Arg Ser Cys Thr Lys Ala Ser Gln Ser Gln Thr Leu  
 1 5 10 15  
 Pro Leu Thr Pro Ser Pro Gly Pro Met Thr Ala Phe Pro Glu Asp Pro  
 20 25 30  
 Gly His Ala Ala Val Pro Pro His Gly Gln Met Asp Thr Gln Ser Leu  
 35 40 45  
 Gly Gly His Cys Trp His Gly Val Ser Ala Arg His Leu Pro Pro Ala  
 50 55 60  
 Pro Pro Asp Gly Pro Thr Arg Gly Cys Ala Asp Val Gly Thr Thr Glu  
 65 70 75 80  
 Pro Arg Cys Thr Leu Asp Gln Gly Ala Gly Pro Ala Ser Gly Arg Pro  
 85 90 95  
 Pro Thr Asn Leu Phe Cys Pro Ala Glu Val Val Gly Gly Ala Ser Trp  
 100 105 110  
 Gly Ala Arg Phe Pro Gln Leu Trp Val  
 115 120  
 <210> 101  
 <211> 386  
 <212> PRT  
 <213> Homo sapien  
 <400> 101  
 Met Phe Asp Thr Thr Pro His Ser Gly Arg Ser Thr Pro Ser Ser Ser  
 1 5 10 15

Pro Ser Leu Arg Lys Arg Leu Gln Leu Leu Pro Pro Ser Arg Pro Pro  
20 25 30

Pro Glu Pro Glu Pro Gly Thr Met Val Glu Lys Gly Ser Asp Ser Ser  
35 40 45

Ser Glu Lys Gly Gly Val Pro Gly Thr Pro Ser Thr Gln Ser Leu Gly  
50 55 60

Ser Arg Asn Phe Ile Arg Asn Ser Lys Lys Met Gln Ser Trp Tyr Ser  
65 70 75 80

Met Leu Ser Pro Thr Tyr Lys Gln Arg Asn Glu Asp Phe Arg Lys Leu  
85 90 95

Phe Ser Lys Leu Pro Glu Ala Glu Arg Leu Ile Val Asp Tyr Ser Cys  
100 105 110

Ala Leu Gln Arg Glu Ile Leu Leu Gln Gly Arg Leu Tyr Leu Ser Glu  
115 120 125

Asn Trp Ile Cys Phe Tyr Ser Asn Ile Phe Arg Trp Glu Thr Thr Ile  
130 135 140

Ser Ile Gln Leu Lys Glu Val Thr Cys Leu Lys Lys Glu Lys Thr Ala  
145 150 155 160

Lys Leu Ile Pro Asn Ala Ile Gln Ile Cys Thr Glu Ser Glu Lys His  
165 170 175

Phe Phe Thr Ser Phe Gly Ala Arg Asp Arg Cys Phe Leu Leu Ile Phe  
180 185 190

Arg Leu Trp Gln Asn Ala Leu Leu Glu Lys Thr Leu Ser Pro Arg Glu  
195 200 205

Leu Trp His Leu Val His Gln Cys Tyr Gly Ser Glu Leu Gly Leu Thr  
210 215 220

Ser Glu Asp Glu Asp Tyr Val Ser Pro Leu Gln Leu Asn Gly Leu Gly  
225 230 235 240

Thr Pro Lys Glu Val Gly Asp Val Ile Ala Leu Ser Asp Ile Thr Ser  
245 250 255

Ser Gly Ala Ala Asp Arg Ser Gln Glu Pro Ser Pro Val Gly Ser Arg

260 265 270  
 Arg Gly His Val Thr Pro Asn Leu Ser Arg Ala Ser Ser Asp Ala Asp  
 275 280 285  
 His Gly Ala Glu Glu Asp Lys Glu Glu Gln Val Asp Ser Gln Pro Asp  
 290 295 300  
 Ala Ser Ser Ser Gln Thr Val Thr Pro Val Ala Glu Pro Pro Ser Thr  
 305 310 315 320  
 Glu Pro Thr Gln Pro Asp Gly Pro Thr Thr Leu Gly Pro Leu Asp Leu  
 325 330 335  
 Leu Pro Ser Glu Glu Leu Leu Thr Asp Thr Ser Asn Ser Ser Ser Ser  
 340 345 350  
 Thr Gly Glu Glu Gly Glu Ala Gly Gly Pro Asn Ser Phe Ala Ser Gly  
 355 360 365  
 Thr Cys Lys Pro Arg Ser Val Leu Ser Lys Arg Gly Trp Ile Arg Pro  
 370 375 380  
 Gln His  
 385  
 <210> 102  
 <211> 190  
 <212> PRT  
 <213> Homo sapien  
 <400> 102  
 Met Phe Gly Phe Asn Lys Val Ser Leu Phe Pro Ser Leu Ser Leu Cys  
 1 5 10 15  
 Pro Ser Ala Phe Pro Ser Leu Ser Ser Pro Ser Leu Pro Gly Phe Ser  
 20 25 30  
 Leu Leu Leu Gly Leu Cys Gly Pro Ser Pro Pro Ser Leu Pro Gly Trp  
 35 40 45  
 Gly Arg Arg Arg Asp Ala Ala Gly Arg Gly Lys Glu Gly Gly Val Ala  
 50 55 60  
 Asp Ala Ala Ala Ala Ser Gly Gly Ser Gly Leu Leu Cys Gly Arg Leu  
 65 70 75 80

Gly Arg Val Gly Ala Ala Ala Ala Glu Gly Gln Ala Gly Ala Leu Arg  
85 90 95

Gly Arg Pro Ala Gln Pro Ser Pro Ala Gln Pro Ser Pro Ala Leu Pro  
100 105 110

Cys Pro Ala Leu Pro Cys Ala Arg Gly Ala Pro Thr Ala Pro His Pro  
115 120 125

Cys Ser Thr Pro His Pro Thr Leu Ala Gly Ala Arg Gln Ala Ala Pro  
130 135 140

His Arg Ser Gly Asn Gly Cys Ser Ser Cys Pro Gln Ala Gly Pro His  
145 150 155 160

Leu Ser Gln Asn Gln Ala Pro Trp Trp Arg Arg Asp Gln Ile Ala Pro  
165 170 175

Gln Arg Arg Val Gly Cys Leu Gly Pro Pro Ala Pro Arg Ala  
180 185 190

<210> 103  
<211> 442  
<212> PRT  
<213> Homo sapien

<400> 103

Arg Arg Gly Gly Leu Arg Arg Leu Arg Pro Phe Val Arg Ala Val Gly  
1 5 10 15

Ser Gly Gly Gly Gly Gly Arg Gly Arg Pro Gly Arg Cys Pro Ala Gly  
20 25 30

Thr Pro Ser Ala Ala Gln Pro Arg Ala Ala Gln Pro Cys Pro Ala Leu  
35 40 45

Pro Cys Pro Ala Leu Arg Pro Gly Arg Ala His Arg Ala Ala Ser Met  
50 55 60

Phe Asp Thr Thr Pro His Ser Gly Arg Ser Thr Pro Ser Ser Ser Pro  
65 70 75 80

Ser Leu Arg Lys Arg Leu Gln Leu Leu Pro Pro Ser Arg Pro Pro Pro  
85 90 95

Glu Pro Glu Pro Gly Thr Met Val Glu Lys Gly Ser Asp Ser Ser Ser



100										105					110				
Glu	Lys	Gly	Gly	Val	Pro	Gly	Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser				
		115					120					125							
Arg	Asn	Phe	Ile	Arg	Asn	Ser	Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met				
	130					135						140							
Leu	Ser	Pro	Thr	Tyr	Lys	Gln	Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe				
145					150					155					160				
Ser	Lys	Leu	Pro	Glu	Ala	Glu	Arg	Leu	Ile	Val	Asp	Tyr	Ser	Cys	Ala				
				165					170					175					
Leu	Gln	Arg	Glu	Ile	Leu	Leu	Gln	Gly	Arg	Leu	Tyr	Leu	Ser	Glu	Asn				
			180					185						190					
Trp	Ile	Cys	Phe	Tyr	Ser	Asn	Ile	Phe	Arg	Trp	Glu	Thr	Thr	Ile	Ser				
		195					200						205						
Ile	Gln	Leu	Lys	Glu	Val	Thr	Cys	Leu	Lys	Lys	Glu	Lys	Thr	Ala	Lys				
	210					215						220							
Leu	Ile	Pro	Asn	Ala	Ile	Gln	Ile	Cys	Thr	Glu	Ser	Glu	Lys	His	Phe				
225					230					235					240				
Phe	Thr	Ser	Phe	Gly	Ala	Arg	Asp	Arg	Cys	Phe	Leu	Leu	Ile	Phe	Arg				
				245					250					255					
Leu	Trp	Gln	Asn	Ala	Leu	Leu	Glu	Lys	Thr	Leu	Ser	Pro	Arg	Glu	Leu				
			260					265					270						
Trp	His	Leu	Val	His	Gln	Cys	Tyr	Gly	Ser	Glu	Leu	Gly	Leu	Thr	Ser				
		275					280					285							
Glu	Asp	Glu	Asp	Tyr	Val	Ser	Pro	Leu	Gln	Leu	Asn	Gly	Leu	Gly	Thr				
	290					295					300								
Pro	Lys	Glu	Val	Gly	Asp	Val	Ile	Ala	Leu	Ser	Asp	Ile	Thr	Ser	Ser				
305					310					315					320				
Gly	Ala	Ala	Asp	Arg	Ser	Gln	Glu	Pro	Ser	Pro	Val	Gly	Ser	Arg	Arg				
				325					330					335					
Gly	His	Val	Thr	Pro	Asn	Leu	Ser	Arg	Ala	Ser	Ser	Asp	Ala	Asp	His				
			340					345					350						

Gly Ala Glu Glu Asp Lys Glu Glu Gln Val Asp Ser Gln Pro Asp Ala  
 355 360 365

Ser Ser Ser Gln Thr Val Thr Pro Val Ala Glu Pro Pro Ser Thr Glu  
 370 375 380

Pro Thr Gln Pro Asp Gly Pro Thr Thr Leu Gly Pro Leu Asp Leu Leu  
 385 390 395 400

Pro Ser Glu Glu Leu Leu Thr Asp Thr Ser Asn Ser Ser Ser Ser Thr  
 405 410 415

Gly Glu Glu Gly Leu Gly Cys Pro Ala Ser Arg Pro Leu Arg Pro Pro  
 420 425 430

Pro His Gln Leu Cys Leu Pro Cys Gly Arg  
 435 440

<210> 104  
 <211> 99  
 <212> PRT  
 <213> Homo sapien

<400> 104

Met Glu Asp Pro Ser Val Arg Cys Ser Phe Gln Leu Thr Ser Gly Arg  
 1 5 10 15

Arg Thr Ser Ala Met Lys Val Thr Gly Ile Phe Leu Leu Ser Ala Leu  
 20 25 30

Ala Leu Leu Ser Leu Ser Gly Asn Thr Gly Ala Asp Ser Leu Gly Arg  
 35 40 45

Glu Ala Lys Cys Tyr Asn Glu Leu Asn Gly Cys Thr Lys Ile Tyr Asp  
 50 55 60

Pro Val Cys Gly Thr Asp Gly Asn Thr Tyr Pro Asn Glu Cys Val Leu  
 65 70 75 80

Cys Phe Glu Asn Arg Lys Arg Gln Thr Ser Ile Leu Ile Gln Lys Ser  
 85 90 95

Gly Pro Cys

<210> 105  
<211> 106  
<212> PRT  
<213> Homo sapien

<400> 105

Ala Leu Asp Val Lys Val Ser His Glu Gly Gly Arg Ser Val Leu Pro  
1 5 10 15

Gln Ser Lys Tyr Ser Val Arg His His Ile Pro Tyr Pro Ser Asn Gly  
20 25 30

Glu Leu His Ser Gln Tyr His Gly Tyr Tyr Val Lys Leu Asn Ala Pro  
35 40 45

Gln His Pro Pro Val Asp Val Glu Asp Gly Asp Gly Ser Ser Gln Ser  
50 55 60

Ser Ser Ala Leu Val His Lys Pro Ser Ala Asn Lys Trp Ser Pro Ser  
65 70 75 80

Lys Ser Val Thr Lys Pro Val Ala Lys Glu Ser Lys Ala Glu Pro Lys  
85 90 95

Ala Lys Lys Ser Glu Leu Ala Ile Pro Lys  
100 105

<210> 106  
<211> 93  
<212> PRT  
<213> Homo sapien

<220>  
<221> MISC\_FEATURE  
<222> (93)..(93)  
<223> X=any amino acid

<400> 106

Ala Leu Asp Val Lys Val Ser His Glu Gly Gly Arg Ser Val Leu Pro  
1 5 10 15

Gln Ser Lys Tyr Ser Val Arg His His Ile Pro Tyr Pro Ser Asn Gly  
20 25 30

Glu Leu His Ser Gln Tyr His Gly Tyr Tyr Val Lys Leu Asn Ala Pro  
35 40 45

Gln His Pro Pro Val Asp Val Glu Asp Gly Asp Gly Ser Ser Gln Ser

50 55 60

Ser Ser Ala Leu Val His Lys Pro Ser Ala Asn Lys Trp Ser Pro Ser  
65 70 75 80

Lys Ser Val Thr Lys Pro Val Ala Lys Glu Ser Lys Xaa  
85 90

<210> 107  
<211> 100  
<212> PRT  
<213> Homo sapien

<400> 107

Met Tyr Met Tyr Ile Gln Thr Thr Thr Leu Thr Val Ser Met Ser Leu  
1 5 10 15

Ser Ala Ser Val Ser Leu Gly Met Leu Tyr Met Pro Lys Val Tyr Ile  
20 25 30

Ile Ile Phe His Pro Glu Gln Asn Val Gln Lys Arg Lys Arg Ser Phe  
35 40 45

Lys Ala Val Val Thr Ala Ala Thr Met Gln Ser Lys Leu Ile Gln Lys  
50 55 60

Gly Asn Asp Arg Pro Asn Gly Glu Val Lys Ser Glu Leu Cys Glu Ser  
65 70 75 80

Leu Glu Thr Asn Thr Ser Ser Thr Lys Thr Thr Tyr Ile Ser Tyr Ser  
85 90 95

Asn His Ser Ile  
100

<210> 108  
<211> 558  
<212> PRT  
<213> Homo sapien

<400> 108

Trp Lys Phe Thr Val Thr Phe Lys Ser Arg Lys Leu Ala Asn Ala His  
1 5 10 15

Arg Ala Phe Ser Pro Trp Ala Leu Met Val Ala Ser Arg Arg Cys Ser  
20 25 30

Leu Arg Trp Cys Pro Phe Cys Cys Val Ala Arg Ile Asn Phe Gly Ser  
 35 40 45

Trp Ile Ala Ile Pro Pro Val Glu Lys Met Val Cys Glu Gly Lys Arg  
 50 55 60

Ser Ala Ser Cys Pro Cys Phe Phe Leu Leu Thr Ala Lys Phe Tyr Trp  
 65 70 75 80

Ile Leu Thr Met Met Gln Arg Thr His Ser Gln Glu Tyr Ala His Ser  
 85 90 95

Ile Arg Val Asp Gly Asp Ile Ile Leu Gly Gly Leu Phe Pro Val His  
 100 105 110

Ala Lys Gly Glu Arg Gly Val Pro Cys Gly Glu Leu Lys Lys Glu Lys  
 115 120 125

Gly Ile His Arg Leu Glu Ala Met Leu Tyr Ala Ile Asp Gln Ile Asn  
 130 135 140

Lys Asp Pro Asp Leu Leu Ser Asn Ile Thr Leu Gly Val Arg Ile Leu  
 145 150 155 160

Asp Thr Cys Ser Arg Asp Thr Tyr Ala Leu Glu Gln Ser Leu Thr Phe  
 165 170 175

Val Gln Ala Leu Ile Glu Lys Asp Ala Ser Asp Val Lys Cys Ala Asn  
 180 185 190

Gly Asp Pro Pro Ile Phe Thr Lys Pro Asp Lys Ile Ser Gly Val Ile  
 195 200 205

Gly Ala Ala Ala Ser Ser Val Ser Ile Met Val Ala Asn Ile Leu Arg  
 210 215 220

Leu Phe Lys Ile Pro Gln Ile Ser Tyr Ala Ser Thr Ala Pro Glu Leu  
 225 230 235 240

Ser Asp Asn Thr Arg Tyr Asp Phe Phe Ser Arg Val Val Pro Pro Asp  
 245 250 255

Ser Tyr Gln Ala Gln Ala Met Val Asp Ile Val Thr Ala Leu Gly Trp  
 260 265 270

Asn Tyr Val Ser Thr Leu Ala Ser Glu Gly Asn Tyr Gly Glu Ser Gly

275	280	285
Val Glu Ala Phe Thr Gln Ile Ser Arg Glu Ile Gly Gly Val Cys Ile 290 295 300		
Ala Gln Ser Gln Lys Ile Pro Arg Glu Pro Arg Pro Gly Glu Phe Glu 305 310 315 320		
Lys Ile Ile Lys Arg Leu Leu Glu Thr Pro Asn Ala Arg Ala Val Ile 325 330 335		
Met Phe Ala Asn Glu Asp Asp Ile Arg Arg Ile Leu Glu Ala Ala Lys 340 345 350		
Lys Leu Asn Gln Ser Gly His Phe Leu Trp Ile Gly Ser Asp Ser Trp 355 360 365		
Gly Ser Lys Ile Ala Pro Val Tyr Gln Gln Glu Glu Ile Ala Glu Gly 370 375 380		
Ala Val Thr Ile Leu Pro Lys Arg Ala Ser Ile Asp Gly Phe Asp Arg 385 390 395 400		
Tyr Phe Arg Ser Arg Thr Leu Ala Asn Asn Arg Arg Asn Val Trp Phe 405 410 415		
Ala Glu Phe Trp Glu Glu Asn Phe Gly Cys Lys Leu Gly Ser His Gly 420 425 430		
Lys Arg Asn Ser His Ile Lys Lys Cys Thr Gly Leu Glu Arg Ile Ala 435 440 445		
Arg Asp Ser Ser Tyr Glu Gln Glu Gly Lys Val Gln Phe Val Ile Asp 450 455 460		
Ala Val Tyr Ser Met Ala Tyr Ala Leu His Asn Met His Lys Asp Leu 465 470 475 480		
Cys Pro Gly Tyr Ile Gly Leu Cys Pro Arg Met Ser Thr Ile Asp Gly 485 490 495		
Lys Glu Leu Leu Gly Tyr Ile Arg Ala Val Asn Phe Asn Gly Cys Arg 500 505 510		
Arg Gly Ile Gln Met Ser Leu Pro Trp Pro Thr Leu Phe Thr Pro Ser 515 520 525		

Phe Ser Ser Ser Trp Ala Val Leu Ala Leu Leu Ser Leu Leu Met Lys  
 530 535 540

Thr Glu Met Leu Leu Asp Val Met Ile Ser Ser Ser Ile Lys  
 545 550 555

<210> 109  
 <211> 501  
 <212> PRT  
 <213> Homo sapien

<400> 109

Met Val Cys Glu Gly Lys Arg Ser Ala Ser Cys Pro Cys Phe Phe Leu  
 1 5 10 15

Leu Thr Ala Lys Phe Tyr Trp Ile Leu Thr Met Met Gln Arg Thr His  
 20 25 30

Ser Gln Glu Tyr Ala His Ser Ile Arg Val Asp Gly Asp Ile Ile Leu  
 35 40 45

Gly Gly Leu Phe Pro Val His Ala Lys Gly Glu Arg Gly Val Pro Cys  
 50 55 60

Gly Glu Leu Lys Lys Glu Lys Gly Ile His Arg Leu Glu Ala Met Leu  
 65 70 75 80

Tyr Ala Ile Asp Gln Ile Asn Lys Asp Pro Asp Leu Leu Ser Asn Ile  
 85 90 95

Thr Leu Gly Val Arg Ile Leu Asp Thr Cys Ser Arg Asp Thr Tyr Ala  
 100 105 110

Leu Glu Gln Ser Leu Thr Phe Val Gln Ala Leu Ile Glu Lys Asp Ala  
 115 120 125

Ser Asp Val Lys Cys Ala Asn Gly Asp Pro Pro Ile Phe Thr Lys Pro  
 130 135 140

Asp Lys Ile Ser Gly Val Ile Gly Ala Ala Ala Ser Ser Val Ser Ile  
 145 150 155 160

Met Val Ala Asn Ile Leu Arg Leu Phe Lys Ile Pro Gln Ile Ser Tyr  
 165 170 175

Ala Ser Thr Ala Pro Glu Leu Ser Asp Asn Thr Arg Tyr Asp Phe Phe  
 180 185 190

Ser Arg Val Val Pro Pro Asp Ser Tyr Gln Ala Gln Ala Met Val Asp  
 195 200 205

Ile Val Thr Ala Leu Gly Trp Asn Tyr Val Ser Thr Leu Ala Ser Glu  
 210 215 220

Gly Asn Tyr Gly Glu Ser Gly Val Glu Ala Phe Thr Gln Ile Ser Arg  
 225 230 235 240

Glu Ile Gly Gly Val Cys Ile Ala Gln Ser Gln Lys Ile Pro Arg Glu  
 245 250 255

Pro Arg Pro Gly Glu Phe Glu Lys Ile Ile Lys Arg Leu Leu Glu Thr  
 260 265 270

Pro Asn Ala Arg Ala Val Ile Met Phe Ala Asn Glu Asp Asp Ile Arg  
 275 280 285

Arg Ile Leu Glu Ala Ala Lys Lys Leu Asn Gln Ser Gly His Phe Leu  
 290 295 300

Trp Ile Gly Ser Asp Ser Trp Gly Ser Lys Ile Ala Pro Val Tyr Gln  
 305 310 315 320

Gln Glu Glu Ile Ala Glu Gly Ala Val Thr Ile Leu Pro Lys Arg Ala  
 325 330 335

Ser Ile Asp Gly Phe Asp Arg Tyr Phe Arg Ser Arg Thr Leu Ala Asn  
 340 345 350

Asn Arg Arg Asn Val Trp Phe Ala Glu Phe Trp Glu Glu Asn Phe Gly  
 355 360 365

Cys Lys Leu Gly Ser His Gly Lys Arg Asn Ser His Ile Lys Lys Cys  
 370 375 380

Thr Gly Leu Glu Arg Ile Ala Arg Asp Ser Ser Tyr Glu Gln Glu Gly  
 385 390 395 400

Lys Val Gln Phe Val Ile Asp Ala Val Tyr Ser Met Ala Tyr Ala Leu  
 405 410 415

His Asn Met His Lys Asp Leu Cys Pro Gly Tyr Ile Gly Leu Cys Pro



Ala Lys Gly Glu Arg Gly Val Pro Cys Gly Glu Leu Lys Lys Glu Lys  
115 120 125

Gly Ile His Arg Leu Glu Ala Met Leu Tyr Ala Ile Asp Gln Ile Asn  
 130 135 140

Lys Asp Pro Asp Leu Leu Ser Asn Ile Thr Leu Gly Val Arg Ile Leu  
 145 150 155 160

Asp Thr Cys Ser Arg Asp Thr Tyr Ala Leu Glu Gln Ser Leu Thr Phe  
 165 170 175

Val Gln Ala Leu Ile Glu Lys Asp Ala Ser Asp Val Lys Cys Ala Asn  
 180 185 190

Gly Asp Pro Pro Ile Phe Thr Lys Pro Asp Lys Ile Ser Gly Val Ile  
 195 200 205

Gly Ala Ala Ala Ser Ser Val Ser Ile Met Val Ala Asn Ile Leu Arg  
 210 215 220

Leu Phe Lys Ile Pro Gln Ile Ser Tyr Ala Ser Thr Ala Pro Glu Leu  
 225 230 235 240

Ser Asp Asn Thr Arg Tyr Asp Phe Phe Ser Arg Val Val Pro Pro Asp  
 245 250 255

Ser Tyr Gln Ala Gln Ala Met Val Asp Ile Val Thr Ala Leu Gly Trp  
 260 265 270

Asn Tyr Val Ser Thr Leu Ala Ser Glu Gly Asn Tyr Gly Glu Ser Gly  
 275 280 285

Val Glu Ala Phe Thr Gln Ile Ser Arg Glu Ile Gly Tyr Pro Ser Leu  
 290 295 300

Phe Gly Ile Gln Gly Cys Leu His Glu Cys Phe Ala Ile Leu Cys Gln  
 305 310 315 320

Val Val Tyr Gln Phe Leu Leu Leu Met Gln Leu Ser Asp Ala Gln Thr  
 325 330 335

Val Tyr

<210> 111  
 <211> 281  
 <212> PRT  
 <213> Homo sapien

&lt;400&gt; 111

Met Val Cys Glu Gly Lys Arg Ser Ala Ser Cys Pro Cys Phe Leu  
1 5 10 15

Leu Thr Ala Lys Phe Tyr Trp Ile Leu Thr Met Met Gln Arg Thr His  
20 25 30

Ser Gln Glu Tyr Ala His Ser Ile Arg Val Asp Gly Asp Ile Ile Leu  
35 40 45

Gly Gly Leu Phe Pro Val His Ala Lys Gly Glu Arg Gly Val Pro Cys  
50 55 60

Gly Glu Leu Lys Lys Glu Lys Gly Ile His Arg Leu Glu Ala Met Leu  
65 70 75 80

Tyr Ala Ile Asp Gln Ile Asn Lys Asp Pro Asp Leu Leu Ser Asn Ile  
85 90 95

Thr Leu Gly Val Arg Ile Leu Asp Thr Cys Ser Arg Asp Thr Tyr Ala  
100 105 110

Leu Glu Gln Ser Leu Thr Phe Val Gln Ala Leu Ile Glu Lys Asp Ala  
115 120 125

Ser Asp Val Lys Cys Ala Asn Gly Asp Pro Pro Ile Phe Thr Lys Pro  
130 135 140

Asp Lys Ile Ser Gly Val Ile Gly Ala Ala Ala Ser Ser Val Ser Ile  
145 150 155 160

Met Val Ala Asn Ile Leu Arg Leu Phe Lys Ile Pro Gln Ile Ser Tyr  
165 170 175

Ala Ser Thr Ala Pro Glu Leu Ser Asp Asn Thr Arg Tyr Asp Phe Phe  
180 185 190

Ser Arg Val Val Pro Pro Asp Ser Tyr Gln Ala Gln Ala Met Val Asp  
195 200 205

Ile Val Thr Ala Leu Gly Trp Asn Tyr Val Ser Thr Leu Ala Ser Glu  
210 215 220

Gly Asn Tyr Gly Glu Ser Gly Val Glu Ala Phe Thr Gln Ile Ser Arg  
225 230 235 240

Glu Ile Gly Tyr Pro Ser Leu Phe Gly Ile Gln Gly Cys Leu His Glu  
 245 250 255

Cys Phe Ala Ile Leu Cys Gln Val Val Tyr Gln Phe Leu Leu Leu Met  
 260 265 270

Gln Leu Ser Asp Ala Gln Thr Val Tyr  
 275 280

<210> 112  
 <211> 433  
 <212> PRT  
 <213> Homo sapien

<400> 112

Met Val Val Phe Leu Ser Gly Asp Asn Leu Ser Ser Pro Ser His Ser  
 1 5 10 15

Gly Ile Ile Trp Gln Cys Leu Glu Thr Phe Trp Val Leu Thr Asn Arg  
 20 25 30

Arg Arg Met Pro Leu Ala Ser Ser Arg Ser Ala Met Leu Leu Ser Ile  
 35 40 45

Leu Gln Cys Pro Gly Gln Pro His Lys Asp Ser Ser Ser Leu Asn Val  
 50 55 60

Asn Ser Ala Glu Val Glu Glu Pro Tyr Phe Thr Gly Thr Arg Gln Glu  
 65 70 75 80

Glu Ser Val Cys Pro Arg Thr Leu Val Ile Ile Thr Cys Pro Leu Gln  
 85 90 95

Tyr Ser Thr Thr Gln Arg Gln Cys Phe Leu Gly Asn Gly Phe Phe Ser  
 100 105 110

Leu Gln Val Leu His Phe Glu Asn Val Lys Asp Val Pro Phe Gly Phe  
 115 120 125

Gln Thr Val Thr Ser Asp Val Asn Lys Leu Ser Ser Phe Tyr Ser Leu  
 130 135 140

Lys Leu Ile Lys Arg Leu Tyr Val Asp Lys Ser Leu Asn Leu Ser Thr  
 145 150 155 160

Glu Phe Ile Ser Ser Thr Lys Arg Pro Tyr Ala Lys Glu Leu Glu Thr  
 165 170 175

Val Asp Phe Lys Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn  
 180 185 190

Ser Ile Lys Asp Leu Thr Asp Gly His Phe Glu Asn Ile Leu Ala Asp  
 195 200 205

Asn Ser Val Asn Asp Gln Thr Lys Ile Leu Val Val Asn Ala Ala Tyr  
 210 215 220

Phe Val Gly Lys Trp Met Lys Lys Phe Pro Glu Ser Glu Thr Lys Glu  
 225 230 235 240

Cys Pro Phe Arg Val Asn Lys Thr Asp Thr Lys Pro Val Gln Met Met  
 245 250 255

Asn Met Glu Ala Thr Phe Cys Met Gly Asn Ile Asp Ser Ile Asn Cys  
 260 265 270

Lys Ile Ile Glu Leu Pro Phe Gln Asn Lys His Leu Ser Met Phe Ile  
 275 280 285

Leu Leu Pro Lys Asp Val Glu Asp Glu Ser Thr Gly Leu Glu Lys Ile  
 290 295 300

Glu Lys Gln Leu Asn Ser Glu Ser Leu Ser Gln Trp Thr Asn Pro Ser  
 305 310 315 320

Thr Met Ala Asn Ala Lys Val Lys Leu Ser Ile Pro Lys Phe Lys Val  
 325 330 335

Glu Lys Met Ile Asp Pro Lys Ala Cys Leu Glu Asn Leu Gly Leu Lys  
 340 345 350

His Ile Phe Ser Glu Asp Thr Ser Asp Phe Ser Gly Met Ser Glu Thr  
 355 360 365

Lys Gly Val Ala Leu Ser Asn Val Ile His Lys Val Cys Leu Glu Ile  
 370 375 380

Thr Glu Asp Gly Gly Asp Ser Ile Glu Val Pro Gly Ala Arg Ile Leu  
 385 390 395 400

Gln His Lys Asp Glu Leu Asn Ala Asp His Pro Phe Ile Tyr Ile Ile

405

410

415

Arg His Asn Lys Thr Arg Asn Ile Ile Phe Phe Gly Lys Phe Cys Ser  
 420 425 430

Pro

<210> 113  
 <211> 705  
 <212> PRT  
 <213> Homo sapien

&lt;400&gt; 113

Met Glu Arg Met Trp Thr Ser Glu Glu Phe Ser Phe Lys Lys Asn Ile  
 1 5 10 15

Met Lys Tyr Ile Leu Ile Thr Gln Gly Leu Leu Leu Val Glu Val Tyr  
 20 25 30

Asn Leu Asp Thr Ser Thr Phe Cys Phe Cys Cys Ser Thr Val His Lys  
 35 40 45

Thr Phe Ser Asn Leu Gln Gly Lys Ile Val Glu Val Val Glu Val Lys  
 50 55 60

Leu Lys Phe Lys Ile Asp Ser Val Asn Thr Ile Gly Lys Glu Ala Glu  
 65 70 75 80

Leu Arg Ile Phe Trp Leu Phe Met Cys Ser Val Leu Leu Ser Ser His  
 85 90 95

Arg Ser Cys Val Val Thr Gln Asp Ser Gly Ser Thr Lys Pro Glu Leu  
 100 105 110

Thr Gly Trp Ile Asp Leu Gln Pro Ile Phe Phe His Tyr Thr Ala Ala  
 115 120 125

Phe Leu Phe Leu Lys Lys Gln Lys Ser Met Glu Gln Leu Leu Gln Lys  
 130 135 140

Glu Ala Pro Leu Phe Asn Trp Leu Thr Glu Ser Met Asn His Cys Arg  
 145 150 155 160

Phe Ala Cys Pro Pro Val Cys Phe Ser His Arg Phe Tyr Leu Ser Glu  
 165 170 175

Trp Leu Leu His Leu Asn Thr Val Ala Met Val Ser Glu Gln Leu Lys  
 180 185 190

Thr Ser Phe Leu His Leu His Ser Lys Gly Phe Ile Phe Ser Arg Asn  
 195 200 205

Lys Val Val Leu Gly Cys Phe Asn Ser Val Asp His Leu Glu Thr Arg  
 210 215 220

Glu Gln Gly Pro Trp Ile Thr Met Ser Thr Leu Gln Val Phe Gly Asn  
 225 230 235 240

Ala Gly Lys Gly Leu His Ser Ser Asn Leu Leu Thr Ser Phe Leu Ser  
 245 250 255

Val Arg Pro Met Leu Ala Cys Asn Tyr Ile Phe Leu Asn Leu Lys Thr  
 260 265 270

Lys Glu Ile Ser Asp Ile Phe Ser Val Ser Phe Phe Ser Phe His Ser  
 275 280 285

Ser Leu Lys Ser His Tyr Cys Ile Thr Phe Gln Ile Met Thr Trp Ile  
 290 295 300

Glu Gly Ser Leu Phe Cys Gln Gly Leu Cys Glu Val Asn Ile Arg Ile  
 305 310 315 320

Ser Thr Thr Thr Lys Leu Lys Asn Glu Ala Ala Leu Thr Glu Met Leu  
 325 330 335

Ala Lys Thr Asn Ser Leu Asp Cys Phe Cys His His Leu Leu Thr Trp  
 340 345 350

Asn Ser Phe His Ile Tyr Phe Ser Tyr Glu Glu Ile Gln Cys Gln Ser  
 355 360 365

Asp His Val Thr Ser Lys Gln Asn Phe Ile Glu Ala Tyr Pro Cys Leu  
 370 375 380

Asn Tyr Ser Lys Ile Lys Tyr Asn Lys Val Asn Tyr Phe Ala Leu Cys  
 385 390 395 400

Ser Ser Ile Val Leu Ser Tyr Ile Tyr Ile Leu Ile Cys Ile Leu Leu  
 405 410 415

Ser Lys Val Ser Glu Thr Thr Cys Trp Arg Ala Val Ala Phe Arg Gln  
 420 425 430

His Gln His His Leu Lys Ala Leu Leu Asn Thr His Tyr Trp Lys Arg  
 435 440 445

Gly Glu Asn Thr Gly Ile Met Pro Val Ile Pro Val Leu Trp Glu Thr  
 450 455 460

Glu Ala Gly Gly Ser Arg Gly Ala Gln Glu Phe Lys Ile Arg Leu Gly  
 465 470 475 480

Asn Thr Ala Arg Pro Leu Ser Leu Gln Lys Gln Lys Gln Lys Thr Asn  
 485 490 495

Arg His Gly Ser Ala Tyr Leu Trp Ser Glu Leu Leu Gly Ser Leu Arg  
 500 505 510

Gln Glu Asp His Leu Asn Pro Gly Val Arg Gly Cys Ser Glu Leu Leu  
 515 520 525

Leu Gly Gln Leu Gln Ser Ser Leu Gly Ser Lys Val Arg Pro Cys Leu  
 530 535 540

Leu Lys Lys Gln Asn Gln Lys Leu Asp Cys Trp Gly Pro Pro Arg Val  
 545 550 555 560

Ser Asp Ser Val Gly Leu Ala Val Gly Met Val Gly Leu Val Ile Cys  
 565 570 575

Leu Ser Asn Lys Arg Pro Gly Asn Ala Pro Ala Ala Gly Pro Gly Pro  
 580 585 590

His Phe Ala Asp Tyr Tyr Ser Glu Lys Ser Thr Asn Ser Asp Val Gly  
 595 600 605

Phe Leu Leu Phe Leu Ile Ser Glu Phe Ile Trp Gly Arg Leu Phe Asn  
 610 615 620

Leu Val Asp Pro His Leu Leu Ser Cys Glu Val Glu Val Asn Ala Thr  
 625 630 635 640

Cys Leu Glu Thr Val Arg Met Arg Asn Ser Glu Leu Lys Tyr Gln Ala  
 645 650 655

Gln Arg Ala Trp Met Leu Glu Glu Met Leu Thr Pro Met Val Arg Pro



Ser Leu Thr Leu Leu Ser Tyr Lys Val Arg Ser Glu Ile Gln Tyr Leu  
675 680 685

Leu Arg Phe Leu Ser Gly Val Lys Cys Cys Asp Ser Lys Ser Leu Ile  
690 695 700

Leu  
705

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<210> 114
<211> 226
<212> PRT
<213> Homo sapien
<400> 114
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Leu Ile Ile Asn Asp Cys Tyr Ser His Ser Ile Gly Gly Val Val Leu  
1 5 10 15

Val Asn Leu Ala Gly Ser Glu Lys Pro Ala Gly Arg Asp Thr Val Gly  
20 25 30

Ser Ile Trp Ser Leu Ala Gly Ala Met Leu Tyr Ala Val Tyr Ile Val  
35 40 45

Met Ile Lys Arg Lys Val Asp Arg Glu Asp Lys Leu Asp Ile Pro Met  
50 55 60

Phe Phe Gly Phe Val Gly Leu Phe Asn Leu Leu Leu Trp Pro Gly  
65 70 75 80

Phe Phe Leu Leu His Tyr Thr Gly Phe Glu Asp Phe Glu Phe Pro Asn  
85 90 95

Lys Val Val Leu Met Cys Ile Ile Ile Asn Gly Leu Ile Gly Thr Val  
100 105 110

Leu Ser Glu Phe Leu Trp Leu Trp Gly Cys Phe Leu Thr Ser Ser Leu  
115 120 125

Ile Gly Thr Leu Ala Leu Ser Leu Thr Ile Pro Leu Ser Ile Ile Ala  
130 135 140

Asp Met Cys Met Gln Lys Val Gln Phe Ser Trp Leu Phe Phe Ala Gly  
145                      150                      155                      160

Ala Ile Pro Val Phe Phe Ser Phe Phe Ile Val Thr Leu Leu Cys His  
 165 170 175

Tyr Asn Asn Trp Asp Pro Val Met Val Gly Ile Arg Arg Ile Phe Ala  
 180 185 190

Phe Ile Cys Arg Lys His Arg Ile Gln Arg Val Pro Glu Asp Ser Glu  
 195 200 205

Gln Cys Glu Ser Leu Ile Ser Met His Ser Val Ser Gln Glu Asp Gly  
 210 215 220

Ala Ser  
 225

<210> 115  
 <211> 570  
 <212> PRT  
 <213> Homo sapien  
 <400> 115

Met Val Pro Pro Arg Arg His Arg Gly Ala Gly Arg Pro Gly Val Leu  
 1 5 10 15

Ser Ser Ser Pro Pro Phe Arg Leu Arg Ser Ala Lys Phe Ser Gly Ile  
 20 25 30

Ala Leu Glu Asp Leu Arg Arg Ala Leu Lys Thr Arg Leu Gln Met Val  
 35 40 45

Cys Val Phe Val Met Asn Arg Met Asn Ser Gln Asn Ser Gly Phe Thr  
 50 55 60

Gln Arg Arg Arg Met Ala Leu Gly Ile Val Ile Leu Leu Leu Val Asp  
 65 70 75 80

Val Ile Trp Val Ala Ser Ser Glu Leu Thr Ser Tyr Val Phe Thr Gln  
 85 90 95

Tyr Asn Lys Pro Phe Phe Ser Thr Phe Ala Lys Thr Ser Met Phe Val  
 100 105 110

Leu Tyr Leu Leu Gly Phe Ile Ile Trp Lys Pro Trp Arg Gln Gln Cys  
 115 120 125

Thr Arg Gly Leu Arg Gly Lys His Ala Ala Phe Phe Ala Asp Ala Glu

Phe Asn Leu Leu Leu Leu Trp Pro Gly Phe Phe Leu Leu His Tyr Thr  
370 375 380

Gly Phe Glu Asp Phe Glu Phe Pro Asn Lys Val Val Leu Met Cys Ile  
385 390 395 400

Ile Ile Asn Gly Leu Ile Gly Thr Val Leu Ser Glu Phe Leu Trp Leu  
405 410 415

Trp Gly Cys Phe Leu Thr Ser Ser Leu Ile Gly Thr Leu Ala Leu Ser  
420 425 430

Leu Thr Ile Pro Leu Ser Ile Ile Ala Asp Met Cys Met Gln Lys Val  
435 440 445

Gln Phe Ser Trp Leu Phe Phe Ala Gly Ala Ile Pro Val Phe Phe Ser  
450 455 460

Phe Phe Ile Val Thr Leu Leu Cys His Tyr Asn Asn Trp Asp Pro Val  
465 470 475 480

Met Val Gly Ile Arg Arg Ile Phe Ala Phe Ile Cys Arg Lys His Arg  
485 490 495

Ile Gln Arg Trp Asn Leu Ala Leu Ser Pro Lys Leu Glu Cys Ser Gly  
500 505 510

Glu Ile Ser Gly His Cys Asn Leu Tyr Leu Leu Gly Ser Ser Asp Ser  
515 520 525

Pro Ala Ser Ala Ser Arg Val Ala Gly Thr Thr Gly Ala Arg His His  
530 535 540

Thr Gln Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe His His Val  
545 550 555 560

Gly Gln Asp Gly Leu Asp Leu Leu Asn Ser  
565 570

<210> 116

<211> 135

<212> PRT

<213> Homo sapien

<400> 116

Met Asp Gly Arg Leu Asp Gly Trp Val Asp Gly Arg Gly Trp Pro Trp  
1 5 10 15

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Met Arg Ser Ala Leu His Thr Gln Thr Arg Trp Glu Arg Phe Val Glu  
20 25 30

His Asp Ser Leu Gln Gln Glu Tyr Met Cys Ala Tyr Leu Cys Gly Gln  
35 40 45

Lys Tyr Leu His Leu Gly Phe Gly Ala Ile Gln Glu Glu Met Ser Gln  
50 55 60

Lys Gln Leu Asn Gln Gly Leu Ser Thr Leu Trp Ile Leu Asn Leu Lys  
65 70 75 80

Met Gly Ala Gly Leu Cys Leu Lys Ala Leu Leu Ser His Leu Leu Gly  
85 90 95

Pro Trp Phe Asn Lys Ala Leu Ser Lys Leu Arg Lys Thr Thr Thr Thr  
100 105 110

Thr Gln Asn Lys Ser Ser Phe Phe Ser Ser Phe Leu Gly Lys Lys Ala  
115 120 125

Leu Phe Phe Arg Glu Arg Val  
130 135

<210> 117  
<211> 82  
<212> PRT  
<213> Homo sapien

<400> 117

Met Leu Leu Glu Arg Arg Ser Val Met Asp Val Val Ala Ala Glu Val  
1 5 10 15

Trp Gly Leu Thr Ala Gln Asn Leu Leu Leu Ser Cys Cys Gly Trp Met  
20 25 30

Glu Gly Trp Met Asp Gly Trp Met Ala Val Asp Gly Arg Gly Cys Ala  
35 40 45

Val Pro Cys Ile Pro Lys Pro Gly Gly Ser Val Leu Leu Ser Met Thr  
50 55 60

Ala Cys Ser Arg Asn Ile Cys Val Pro Ile Cys Val Asp Lys Asn Ile  
65 70 75 80

Tyr Thr

<210> 118  
 <211> 146  
 <212> PRT  
 <213> Homo sapien

<400> 118

Asn His Tyr Arg Arg Ile Gly Ala Leu Asp Ala Ala Arg Ala Ala Gln  
 1 5 10 15

Cys Asp Gly Cys Gly Arg Gly Arg Gly Leu Gly Pro Asp Cys Ser Glu  
 20 25 30

Leu Ala Ala Val Leu Leu Arg Met Asp Gly Arg Leu Asp Gly Trp Val  
 35 40 45

Asp Gly Arg Gly Trp Pro Trp Met Arg Ser Ala Leu His Thr Gln Thr  
 50 55 60

Arg Trp Glu Arg Phe Val Glu His Asp Ser Leu Gln Gln Glu Tyr Met  
 65 70 75 80

Cys Ala Tyr Leu Cys Gly Gln Lys Tyr Leu His Leu Gly Phe Gly Ala  
 85 90 95

Ile Gln Glu Glu Met Ser Gln Lys Gln Leu Asn Gln Gly Leu Ser Thr  
 100 105 110

Leu Trp Ile Leu Asn Leu Lys Met Gly Ala Gly Leu Cys Leu Lys Ala  
 115 120 125

Leu Leu Ser His Leu Leu Gly Pro Trp Phe Asn Lys Ala Leu Ser Lys  
 130 135 140

Leu Arg  
 145

<210> 119  
 <211> 614  
 <212> PRT  
 <213> Homo sapien

<400> 119

Met Asp Ser Pro Ser Pro Met Asp Pro His Met Ala Glu Gln Thr Phe  
 1 5 10 15

Glu Gln Ala Ile Gln Ala Ala Ser Arg Ile Ile Arg Asn Glu Gln Phe

20	25	30
Ala Ile Arg Arg Phe Gln Ser Met Pro Val Arg Leu Leu Gly His Ser 35 40 45		
Pro Val Leu Arg Asn Ile Thr Asn Ser Gln Ala Pro Asp Gly Arg Arg 50 55 60		
Lys Ser Glu Ala Gly Ser Gly Ala Ala Ser Ser Ser Gly Glu Asp Lys 65 70 75 80		
Glu Asn Val Arg Phe Trp Lys Ala Gly Val Gly Ala Leu Arg Glu Glu 85 90 95		
Glu Gly Ala Cys Trp Gly Gly Ser Leu Ala Cys Glu Asp Pro Pro Leu 100 105 110		
Pro Ser Trp Leu Gln Asp Gly Phe Val Phe Lys Met Pro Trp Lys Pro 115 120 125		
Thr His Pro Ser Ser Thr His Ala Leu Ala Glu Trp Ala Ser Arg Arg 130 135 140		
Glu Ala Phe Ala Gln Arg Pro Ser Ser Ala Pro Asp Leu Met Cys Leu 145 150 155 160		
Ser Pro Asp Arg Lys Met Glu Val Glu Glu Leu Ser Pro Leu Ala Leu 165 170 175		
Gly Arg Phe Ser Leu Thr Pro Ala Glu Gly Asp Thr Glu Glu Asp Asp 180 185 190		
Gly Phe Val Asp Ile Leu Glu Ser Asp Leu Lys Val Asn Ser Leu Val 195 200 205		
Pro Pro Gly Pro Tyr Leu Pro Ile Pro Gly Phe Ala Gln Lys Lys Arg 210 215 220		
Ala Leu Ser Pro Val Trp Gln Asp His Asp Val Ile Pro Val Ser Glu 225 230 235 240		
Glu Glu Ser Glu Val Thr Glu Ser Gln Pro Asn Leu Trp Pro Met Arg 245 250 255		
Glu Glu Gln Val Ala Gly Ala Thr Val Glu Gly Gly Leu Gly Gly Arg 260 265 270		

Gly Ala Ser His Pro Asn Leu Glu Phe Ala Arg Glu Thr Gly Lys Ala  
 275 280 285

Val Leu Glu Asp Ser Gly Thr Gly Gly Val Trp Pro Met Pro Val Gly  
 290 295 300

Cys Asp Pro Val Leu Ala Asn Leu Ala Ser Asp Asp Asp Ala Val Pro  
 305 310 315 320

Pro Gly Met Glu Ser Leu Ile Ser Ala Pro Leu Val Lys Thr Leu Glu  
 325 330 335

Lys Glu Glu Glu Lys Asp Leu Val Met Tyr Ser Lys Cys Gln Arg Leu  
 340 345 350

Phe Arg Ser Pro Ser Met Pro Cys Ser Val Ile Arg Pro Ile Leu Lys  
 355 360 365

Arg Leu Glu Arg Pro Gln Asp Arg Asp Thr Pro Val Gln Asn Lys Arg  
 370 375 380

Arg Arg Ser Val Thr Pro Pro Glu Glu Gln Gln Glu Ala Glu Glu Pro  
 385 390 395 400

Lys Ala Arg Val Leu Arg Ser Lys Ser Leu Cys His Asp Glu Ile Glu  
 405 410 415

Asn Leu Leu Asp Ser Asp His Arg Glu Leu Ile Gly Asp Tyr Ser Lys  
 420 425 430

Ala Phe Leu Leu Gln Thr Val Asp Gly Lys His Gln Asp Leu Lys Tyr  
 435 440 445

Ile Ser Pro Glu Thr Met Val Ala Leu Leu Thr Gly Lys Phe Ser Asn  
 450 455 460

Ile Val Asp Lys Phe Val Ile Val Asp Cys Arg Tyr Pro Tyr Glu Tyr  
 465 470 475 480

Glu Gly Gly His Ile Lys Thr Ala Val Asn Leu Pro Leu Glu Arg Asp  
 485 490 495

Ala Glu Ser Phe Leu Leu Lys Ser Pro Ile Ala Pro Cys Ser Leu Asp  
 500 505 510



Lys Arg Val Ile Leu Ile Phe His Cys Glu Phe Ser Ser Glu Arg Gly  
 515 520 525

Pro Arg Met Cys Arg Phe Ile Arg Glu Arg Asp Arg Ala Val Asn Asp  
 530 535 540

Tyr Pro Ser Leu Tyr Tyr Pro Glu Met Tyr Ile Leu Lys Gly Gly Tyr  
 545 550 555 560

Lys Glu Phe Phe Pro Gln His Pro Asn Phe Cys Glu Pro Gln Asp Tyr  
 565 570 575

Arg Pro Met Asn His Glu Ala Phe Lys Asp Glu Leu Lys Thr Phe Arg  
 580 585 590

Leu Lys Thr Arg Ser Trp Ala Gly Glu Arg Ser Arg Arg Glu Leu Cys  
 595 600 605

Ser Arg Leu Gln Asp Gln  
 610

<210> 120  
 <211> 413  
 <212> PRT  
 <213> Homo sapien

<400> 120

Leu Lys Gly Lys Gln Pro Cys Pro Thr Arg Pro Leu Pro Ser Tyr Pro  
 1 5 10 15

Trp Val Arg Pro Lys Glu Glu Ser Ser Glu Pro Leu Trp Gln Asp His  
 20 25 30

Asp Val Ile Pro Val Ser Glu Glu Glu Ser Glu Val Thr Glu Ser Gln  
 35 40 45

Pro Asn Leu Trp Pro Met Arg Glu Glu Gln Val Ala Gly Ala Thr Val  
 50 55 60

Glu Gly Gly Leu Gly Gly Arg Gly Ala Ser His Pro Asn Leu Glu Phe  
 65 70 75 80

Ala Arg Glu Thr Gly Lys Ala Val Leu Glu Asp Ser Gly Thr Gly Gly  
 85 90 95

Val Trp Pro Met Pro Val Gly Cys Asp Pro Val Leu Ala Asn Leu Ala

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100	105	110
Ser Asp Asp Asp Ala Val Pro Pro Gly Met Glu Ser Leu Ile Ser Ala 115 120 125		
Pro Leu Val Lys Thr Leu Glu Lys Glu Glu Glu Lys Asp Leu Val Met 130 135 140		
Tyr Ser Lys Cys Gln Arg Leu Phe Arg Ser Pro Ser Met Pro Cys Ser 145 150 155 160		
Val Ile Arg Pro Ile Leu Lys Arg Leu Glu Arg Pro Gln Asp Arg Asp 165 170 175		
Thr Pro Val Gln Asn Lys Arg Arg Arg Ser Val Thr Pro Pro Glu Glu 180 185 190		
Gln Gln Glu Ala Glu Glu Pro Lys Ala Arg Val Leu Arg Ser Lys Ser 195 200 205		
Leu Cys His Asp Glu Ile Glu Asn Leu Leu Asp Ser Asp His Arg Glu 210 215 220		
Leu Ile Gly Asp Tyr Ser Lys Ala Phe Leu Leu Gln Thr Val Asp Gly 225 230 235 240		
Lys His Gln Asp Leu Lys Tyr Ile Ser Pro Glu Thr Met Val Ala Leu 245 250 255		
Leu Thr Gly Lys Phe Ser Asn Ile Val Asp Lys Phe Val Ile Val Asp 260 265 270		
Cys Arg Tyr Pro Tyr Glu Tyr Glu Gly Gly His Ile Lys Thr Ala Val 275 280 285		
Asn Leu Pro Leu Glu Arg Asp Ala Glu Ser Phe Leu Leu Lys Ser Pro 290 295 300		
Ile Ala Pro Cys Ser Leu Asp Lys Arg Val Ile Leu Ile Phe His Cys 305 310 315 320		
Glu Phe Ser Ser Glu Arg Gly Pro Arg Met Cys Arg Phe Ile Arg Glu 325 330 335		
Arg Asp Arg Ala Val Asn Asp Tyr Pro Ser Leu Tyr Tyr Pro Glu Met 340 345 350		

Tyr Ile Leu Lys Gly Gly Tyr Lys Glu Phe Phe Pro Gln His Pro Asn  
                   355                                  360                                  365

Phe Cys Glu Pro Gln Asp Tyr Arg Pro Met Asn His Glu Ala Phe Lys  
                   370                                  375                                  380

Asp Glu Leu Lys Thr Phe Arg Leu Lys Thr Arg Ser Trp Ala Gly Glu  
                   385                                  390                                  395                                  400

Arg Ser Arg Arg Glu Leu Cys Ser Arg Leu Gln Asp Gln  
                                   405                                  410

<210> 121  
 <211> 331  
 <212> PRT  
 <213> Homo sapien

<400> 121

Met Glu Asp Gly Val Leu Lys Glu Gly Phe Leu Val Lys Arg Gly His  
   1                                  5                                  10                                  15

Ile Val His Asn Trp Lys Ala Arg Trp Phe Ile Leu Arg Gln Asn Thr  
                                   20                                  25                                  30

Leu Val Tyr Tyr Lys Leu Glu Gly Gly Arg Arg Val Thr Pro Pro Lys  
                                   35                                  40                                  45

Gly Arg Ile Leu Leu Asp Gly Cys Thr Ile Thr Cys Pro Cys Leu Glu  
                   50                                  55                                  60

Tyr Glu Asn Arg Pro Leu Leu Ile Lys Leu Lys Thr Gln Thr Ser Thr  
                   65                                  70                                  75                                  80

Glu Tyr Phe Leu Glu Ala Cys Ser Arg Glu Glu Arg Asp Ala Trp Ala  
                                   85                                  90                                  95

Phe Glu Ile Thr Gly Ala Ile His Ala Gly Gln Pro Gly Lys Val Gln  
                                   100                                  105                                  110

Gln Leu His Ser Leu Arg Asn Ser Phe Lys Leu Pro Pro His Ile Ser  
                                   115                                  120                                  125

Leu His Arg Ile Val Asp Lys Met His Asp Ser Asn Thr Gly Ile Arg  
                   130                                  135                                  140

Ser Ser Pro Asn Met Glu Gln Gly Ser Thr Tyr Lys Lys Thr Phe Leu  
145 150 155 160

Gly Ser Ser Leu Val Asp Trp Leu Ile Ser Asn Ser Phe Thr Ala Ser  
165 170 175

Arg Leu Glu Ala Val Thr Leu Ala Ser Met Leu Met Glu Glu Asn Phe  
180 185 190

Leu Arg Pro Val Gly Val Arg Ser Met Gly Ala Ile Arg Ser Gly Asp  
195 200 205

Leu Ala Glu Gln Phe Leu Asp Asp Ser Thr Ala Leu Tyr Thr Phe Ala  
210 215 220

Glu Ser Tyr Lys Lys Lys Ile Ser Pro Lys Glu Glu Ile Ser Leu Ser  
225 230 235 240

Thr Val Glu Leu Ser Gly Thr Val Val Lys Gln Gly Tyr Leu Ala Lys  
245 250 255

Gln Gly His Lys Arg Lys Asn Trp Lys Val Arg Arg Phe Val Leu Arg  
260 265 270

Lys Asp Pro Ala Phe Leu His Tyr Tyr Asp Pro Ser Lys Glu Glu Asn  
275 280 285

Arg Pro Val Gly Gly Phe Ser Leu Arg Gly Ser Leu Val Ser Ala Leu  
290 295 300

Glu Asp Asn Gly Val Pro Thr Gly Lys Val Gln Leu Gln Pro Trp Pro  
305 310 315 320

Glu Asp Leu Arg Gly Leu Pro Pro Ala Pro Gln  
325 330

<210> 122

<211> 176

<212> PRT

<213> Homo sapien

<400> 122

Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met Ala Met Lys Gly  
1 5 10 15

Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Arg Phe Gly Ile Gln Ala  
20 25 30

Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro Met Gly Asp Arg  
35 40 45

Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val Gln Thr Val Ala  
50 55 60

Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu Lys Glu Gly Arg  
65 70 75 80

Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala Asn Leu Leu Tyr  
85 90 95

Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val Ile Ala Gly Leu  
100 105 110

Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu Asp Leu Ile Gly  
115 120 125

Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly Thr Cys Ala Glu  
130 135 140

Gln Met Tyr Gly Met Cys Glu Ser Leu Trp Glu Pro Asn Met Val Arg  
145 150 155 160

Trp Trp His Gly Glu Gly Leu Gly Ser Glu Leu Pro Thr Leu Gly His  
165 170 175

<210> 123  
<211> 158  
<212> PRT  
<213> Homo sapien

<400> 123

Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met Ala Met Lys Gly  
1 5 10 15

Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Arg Phe Gly Ile Gln Ala  
20 25 30

Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro Met Gly Asp Arg  
35 40 45

Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val Gln Thr Val Ala  
50 55 60

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Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu Lys Glu Gly Arg  
65 70 75 80

Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala Asn Leu Leu Tyr  
85 90 95

Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val Ile Ala Gly Leu  
100 105 110

Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu Asp Leu Ile Gly  
115 120 125

Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly Thr Cys Ala Glu  
130 135 140

Gln Met Tyr Leu Gly Arg Asp His Ala Lys Pro Asn Ser Ser  
145 150 155

<210> 124

<211> 246

<212> PRT

<213> Homo sapien

<400> 124

Met Leu Phe Pro Gln Val Pro Pro Pro Arg Pro Gly Leu Ala Asp Pro  
1 5 10 15

Pro Leu Pro Phe Pro Ser Ser Asn Leu Asn Lys Pro Tyr Leu Phe Ser  
20 25 30

Val Leu Leu Gly Ala Trp Gln Leu Gly Asn Pro Gly Ser Arg Ser Gln  
35 40 45

Lys Val Gly Val Ala Trp Val Glu Pro His Pro Val Tyr Ser Trp Lys  
50 55 60

Glu Gly Ala Cys Ala Asp Ile Ala Leu Val Arg Leu Glu Arg Ser Ile  
65 70 75 80

Gln Phe Ser Glu Arg Val Leu Pro Ile Cys Leu Pro Asp Ala Ser Ile  
85 90 95

His Leu Pro Pro Asn Thr His Cys Trp Ile Ser Gly Trp Gly Ser Ile  
100 105 110

Gln Asp Gly Val Pro Leu Pro His Pro Gln Thr Leu Gln Lys Leu Lys  
115 120 125

Val Pro Ile Ile Asp Ser Glu Val Cys Ser His Leu Tyr Trp Arg Gly  
130 135 140

Ala Gly Gln Gly Pro Ile Thr Glu Asp Met Leu Cys Ala Gly Tyr Leu  
145 150 155 160

Glu Gly Glu Arg Asp Ala Cys Leu Gly Asp Ser Gly Gly Pro Leu Met  
165 170 175

Cys Gln Val Asp Gly Ala Trp Leu Leu Ala Gly Ile Ile Ser Trp Gly  
180 185 190

Glu Gly Cys Ala Glu Arg Asn Arg Pro Gly Val Tyr Ile Ser Leu Ser  
195 200 205

Ala His Arg Ser Trp Val Glu Lys Ile Val Gln Gly Val Gln Leu Arg  
210 215 220

Gly Arg Ala Gln Gly Gly Gly Ala Leu Arg Ala Pro Ser Gln Gly Ser  
225 230 235 240

Gly Ala Ala Ala Arg Ser  
245

<210> 125

<211> 273

<212> PRT

<213> Homo sapien

<400> 125

Met Arg Leu Trp Leu Gly Arg Asp Ala Glu Gly Thr Glu Leu Ser Arg  
1 5 10 15

Arg His Asn Trp Thr Lys Pro Glu Pro Gln Ala Pro Val Ala Trp Glu  
20 25 30

Arg Val Ala Pro Ser Asn Leu Pro Gln Gly His Pro Leu Pro Lys Ser  
35 40 45

Phe Ser Ser Pro Pro Ser Pro Ser Asn Lys Arg Glu Glu Glu Glu  
50 55 60

Glu Phe Asn Phe Glu Val Ile Pro Pro Pro Pro Glu Phe Ser Asn Asp  
65 70 75 80

Pro Glu Pro Pro Ala Pro Ala Leu Gln Tyr Leu Gly Arg Gln Ser Ser  
85 90 95

Pro Pro Arg Asn Asn Tyr Ser Asp Leu Arg Gln Leu Pro Asn Ala Gly  
100 105 110

Pro Gly Ala Pro Pro Ala Leu Gly Phe Ser Arg Phe Pro Ala Gly Ala  
115 120 125

Arg Tyr Ala Gly Ala Gly Gly Leu Glu Arg Phe Ser Gly Gly Gly Arg  
130 135 140

Ser Leu Ile Lys Lys Arg Leu Tyr Val Gly Glu Pro His Arg Gly Pro  
145 150 155 160

Gly Leu Pro His Gly Gly Thr Gly Arg Ser Leu Ser Ser Pro Asn Cys  
165 170 175

Phe Gly Pro Gln Pro Gly Gly Pro Glu Met Arg Arg Val Asn Ser Ala  
180 185 190

Gly Arg Ala Pro Pro Gly Gly Leu His Ala Pro Arg Leu Ser Leu Glu  
195 200 205

Gly Ala Ala Arg Gly Ala Ala Glu Ala Lys His Lys Ala Pro Gly Ser  
210 215 220

Ala Asp Tyr Gly Phe Ala Pro Ala Ala Gly Arg Ser Pro Tyr Thr Thr  
225 230 235 240

Thr Arg Tyr Gly Ser Pro Ile Asn Thr Phe Thr Val Arg Pro Gly Thr  
245 250 255

Arg His Pro Ile Ser Tyr Val Cys Ser Gly Ala His Arg Lys Ala Thr  
260 265 270

Ser

<210> 126  
<211> 278  
<212> PRT  
<213> Homo sapien

<400> 126

Ser Ser Cys His Asn Leu Arg Leu Trp Leu Gly Arg Asp Ala Glu Gly  
1 5 10 15



Thr Glu Leu Ser Arg Arg His Asn Trp Thr Lys Pro Glu Pro Gln Ala  
 20 25 30

Pro Val Ala Trp Glu Arg Val Ala Pro Ser Asn Leu Pro Gln Gly His  
 35 40 45

Pro Leu Pro Lys Ser Phe Ser Ser Pro Pro Ser Pro Ser Asn Lys Arg  
 50 55 60

Glu Glu Glu Glu Glu Glu Phe Asn Phe Glu Val Ile Pro Pro Pro Pro  
 65 70 75 80

Glu Phe Ser Asn Asp Pro Glu Pro Pro Ala Pro Ala Leu Gln Tyr Leu  
 85 90 95

Gly Arg Gln Ser Ser Pro Pro Arg Asn Asn Tyr Ser Asp Leu Arg Gln  
 100 105 110

Leu Pro Asn Ala Gly Pro Gly Ala Pro Pro Ala Leu Gly Phe Ser Arg  
 115 120 125

Phe Pro Ala Gly Ala Arg Tyr Ala Gly Ala Gly Gly Leu Glu Arg Phe  
 130 135 140

Ser Gly Gly Gly Arg Ser Leu Ile Lys Lys Arg Leu Tyr Val Gly Glu  
 145 150 155 160

Pro His Arg Gly Pro Gly Leu Pro His Gly Gly Thr Gly Arg Ser Leu  
 165 170 175

Ser Ser Pro Asn Cys Phe Gly Pro Gln Pro Gly Gly Pro Glu Met Arg  
 180 185 190

Arg Val Asn Ser Ala Gly Arg Ala Pro Pro Gly Gly Leu His Ala Pro  
 195 200 205

Arg Leu Ser Leu Glu Gly Ala Ala Arg Gly Ala Ala Glu Ala Lys His  
 210 215 220

Lys Ala Pro Gly Ser Ala Asp Tyr Gly Phe Ala Pro Ala Ala Gly Arg  
 225 230 235 240

Ser Pro Tyr Thr Thr Thr Arg Tyr Gly Ser Pro Ile Asn Thr Phe Thr  
 245 250 255

Val Arg Pro Gly Thr Arg His Pro Ile Ser Tyr Val Cys Ser Gly Ala  
 260 265 270

His Arg Lys Ala Thr Ser  
 275

<210> 127  
 <211> 2306  
 <212> PRT  
 <213> Homo sapien

<400> 127

Met Ala Ala Leu Val Leu Glu Asp Gly Ser Val Leu Arg Gly Gln Pro  
 1 5 10 15

Phe Gly Ala Ala Val Ser Thr Ala Gly Glu Val Val Phe Gln Thr Gly  
 20 25 30

Met Val Gly Tyr Pro Glu Ala Leu Thr Asp Pro Ser Tyr Lys Ala Gln  
 35 40 45

Ile Leu Val Leu Thr Tyr Pro Leu Ile Gly Asn Tyr Gly Ile Pro Pro  
 50 55 60

Asp Glu Met Asp Glu Phe Gly Leu Cys Lys Trp Phe Glu Ser Ser Gly  
 65 70 75 80

Ile His Val Ala Ala Leu Val Val Gly Glu Cys Cys Pro Thr Pro Ser  
 85 90 95

His Trp Ser Ala Thr Arg Thr Leu His Glu Trp Leu Gln Gln His Gly  
 100 105 110

Ile Pro Gly Leu Gln Gly Val Asp Thr Arg Glu Leu Thr Lys Lys Leu  
 115 120 125

Arg Glu Gln Gly Ser Leu Leu Gly Lys Leu Val Gln Asn Gly Thr Glu  
 130 135 140

Pro Ser Ser Leu Pro Phe Leu Asp Pro Asn Ala Arg Pro Leu Val Pro  
 145 150 155 160

Glu Val Ser Ile Lys Thr Pro Arg Val Phe Asn Thr Gly Gly Ala Pro  
 165 170 175

Arg Ile Leu Ala Leu Asp Cys Gly Leu Lys Tyr Asn Gln Ile Arg Cys

180	185	190
Leu Cys Gln Arg Gly Ala Glu Val Thr Val Val Pro Trp Asp His Ala		
195	200	205
Leu Asp Ser Gln Glu Tyr Glu Gly Leu Phe Leu Ser Asn Gly Pro Gly		
210	215	220
Asp Pro Ala Ser Tyr Pro Ser Val Val Ser Thr Leu Ser Arg Val Leu		
225	230	235
Ser Glu Pro Asn Pro Arg Pro Val Phe Gly Ile Cys Leu Gly His Gln		
245	250	255
Leu Leu Ala Leu Ala Ile Gly Ala Lys Thr Tyr Lys Met Arg Tyr Gly		
260	265	270
Asn Arg Gly His Asn Gln Pro Cys Leu Leu Val Gly Ser Gly Arg Cys		
275	280	285
Phe Leu Thr Ser Gln Asn His Gly Phe Ala Val Glu Thr Asp Ser Leu		
290	295	300
Pro Ala Asp Trp Ala Pro Leu Phe Thr Asn Ala Asn Asp Gly Ser Asn		
305	310	315
Glu Gly Ile Val His Asn Ser Leu Pro Phe Phe Ser Val Gln Phe His		
325	330	335
Pro Glu His Gln Ala Gly Pro Ser Asp Met Glu Leu Leu Phe Asp Ile		
340	345	350
Phe Leu Glu Thr Val Lys Glu Ala Thr Ala Gly Asn Pro Gly Gly Gln		
355	360	365
Thr Val Arg Glu Arg Leu Thr Glu Arg Leu Cys Pro Pro Gly Ile Pro		
370	375	380
Thr Pro Gly Ser Gly Leu Pro Pro Pro Arg Lys Val Leu Ile Leu Gly		
385	390	395
Ser Gly Gly Leu Ser Ile Gly Gln Ala Gly Glu Phe Asp Tyr Ser Gly		
405	410	415
Ser Gln Ala Ile Lys Ala Leu Lys Glu Glu Asn Ile Gln Thr Leu Leu		
420	425	430

Ile Asn Pro Asn Ile Ala Thr Val Gln Thr Ser Gln Gly Leu Ala Asp  
 435 440 445

Lys Val Tyr Phe Leu Pro Ile Thr Pro His Tyr Val Thr Gln Val Ile  
 450 455 460

Arg Asn Glu Arg Pro Asp Gly Val Leu Leu Thr Phe Gly Gly Gln Thr  
 465 470 475 480

Ala Leu Asn Cys Gly Val Glu Leu Thr Lys Ala Gly Val Leu Ala Arg  
 485 490 495

Tyr Gly Val Arg Val Leu Gly Thr Thr Val Glu Thr Ile Glu Leu Thr  
 500 505 510

Glu Asp Arg Arg Ala Phe Ala Ala Arg Met Ala Glu Ile Gly Glu His  
 515 520 525

Val Ala Pro Ser Glu Ala Gly Asn Ser Leu Glu Gln Ala Gln Ala Ala  
 530 535 540

Ala Glu Arg Leu Gly Tyr Pro Val Leu Val Arg Ala Ala Phe Ala Val  
 545 550 555 560

Gly Gly Leu Gly Ser Gly Phe Ala Ser Asn Arg Glu Glu Leu Ser Ala  
 565 570 575

Leu Val Ala Pro Ala Phe Ala His Thr Ser Gln Val Leu Val Asp Lys  
 580 585 590

Ser Leu Lys Gly Trp Lys Glu Ile Glu Tyr Glu Val Val Arg Asp Ala  
 595 600 605

Tyr Gly Asn Cys Val Thr Val Cys Asn Met Glu Asn Leu Asp Pro Leu  
 610 615 620

Gly Ile His Thr Gly Glu Ser Ile Val Val Ala Pro Ser Gln Thr Leu  
 625 630 635 640

Asn Asp Arg Glu Tyr Gln Leu Leu Arg Gln Thr Ala Ile Lys Val Thr  
 645 650 655

Gln His Leu Gly Ile Val Gly Glu Cys Asn Val Gln Tyr Ala Leu Asn  
 660 665 670

Pro Glu Ser Glu Gln Tyr Tyr Ile Ile Glu Val Asn Ala Arg Leu Ser  
 675 680 685

Arg Ser Ser Ala Leu Ala Ser Lys Ala Thr Gly Tyr Pro Leu Ala Tyr  
 690 695 700

Val Ala Ala Lys Leu Ala Leu Gly Ile Pro Leu Pro Glu Leu Arg Asn  
 705 710 715 720

Ser Val Thr Gly Gly Thr Ala Ala Phe Glu Pro Ser Val Asp Tyr Cys  
 725 730 735

Val Val Lys Ile Pro Arg Trp Asp Leu Ser Lys Phe Leu Arg Val Ser  
 740 745 750

Thr Lys Ile Gly Ser Cys Met Lys Ser Val Gly Glu Val Met Gly Ile  
 755 760 765

Gly Arg Ser Phe Glu Glu Ala Phe Gln Lys Ala Leu Arg Met Val Asp  
 770 775 780

Glu Asn Cys Val Gly Phe Asp His Thr Val Lys Pro Val Ser Asp Met  
 785 790 795 800

Glu Leu Glu Thr Pro Thr Asp Lys Arg Ile Phe Val Val Ala Ala Ala  
 805 810 815

Leu Trp Ala Gly Tyr Ser Val Asp Arg Leu Tyr Glu Leu Thr Arg Ile  
 820 825 830

Asp Arg Trp Phe Leu His Arg Met Lys Arg Ile Ile Ala His Ala Gln  
 835 840 845

Leu Leu Glu Gln His Arg Gly Gln Pro Leu Pro Pro Asp Leu Leu Gln  
 850 855 860

Gln Ala Lys Cys Leu Gly Phe Ser Asp Lys Gln Ile Ala Leu Ala Val  
 865 870 875 880

Leu Ser Thr Glu Leu Ala Val Arg Lys Leu Arg Gln Glu Leu Gly Ile  
 885 890 895

Cys Pro Ala Val Lys Gln Ile Asp Thr Val Ala Ala Glu Trp Pro Ala  
 900 905 910

Gln Thr Asn Tyr Leu Tyr Leu Thr Tyr Trp Gly Thr Thr His Asp Leu  
 915 920 925

Thr Phe Arg Thr Pro His Val Leu Val Leu Gly Ser Gly Val Tyr Arg  
 930 935 940

Ile Gly Ser Ser Val Glu Phe Asp Trp Cys Ala Val Gly Cys Ile Gln  
 945 950 955 960

Gln Leu Arg Lys Met Gly Tyr Lys Thr Ile Met Val Asn Tyr Asn Pro  
 965 970 975

Glu Thr Val Ser Thr Asp Tyr Asp Met Cys Asp Arg Leu Tyr Phe Asp  
 980 985 990

Glu Ile Ser Phe Glu Val Val Met Asp Ile Tyr Glu Leu Glu Asn Pro  
 995 1000 1005

Glu Gly Val Ile Leu Ser Met Gly Gly Gln Leu Pro Asn Asn Met  
 1010 1015 1020

Ala Met Ala Leu His Arg Gln Gln Cys Arg Val Leu Gly Thr Ser  
 1025 1030 1035

Pro Glu Ala Ile Asp Ser Ala Glu Asn Arg Phe Lys Phe Ser Arg  
 1040 1045 1050

Leu Leu Asp Thr Ile Gly Ile Ser Gln Pro Gln Trp Arg Glu Leu  
 1055 1060 1065

Ser Asp Leu Glu Ser Ala Arg Gln Phe Cys Gln Thr Val Gly Tyr  
 1070 1075 1080

Pro Cys Val Val Arg Pro Ser Tyr Val Leu Ser Gly Ala Ala Met  
 1085 1090 1095

Asn Val Ala Tyr Thr Asp Gly Asp Leu Glu Arg Phe Leu Ser Ser  
 1100 1105 1110

Ala Ala Ala Val Ser Lys Glu His Pro Val Val Ile Ser Lys Phe  
 1115 1120 1125

Ile Gln Glu Ala Lys Glu Ile Asp Val Asp Ala Val Ala Ser Asp  
 1130 1135 1140

Gly Val Val Ala Ala Ile Ala Ile Ser Glu His Val Glu Asn Ala

1145	1150	1155
Gly Val His Ser Gly Asp Ala Thr Leu Val Thr Pro Pro Gln Asp 1160 1165 1170		
Ile Thr Ala Lys Thr Leu Glu Arg Ile Lys Ala Ile Val His Ala 1175 1180 1185		
Val Gly Gln Glu Leu Gln Val Thr Gly Pro Phe Asn Leu Gln Leu 1190 1195 1200		
Ile Ala Lys Asp Asp Gln Leu Lys Val Ile Glu Cys Asn Val Arg 1205 1210 1215		
Val Ser Arg Ser Phe Pro Phe Val Ser Lys Thr Leu Gly Val Asp 1220 1225 1230		
Leu Val Ala Leu Ala Thr Arg Val Ile Met Gly Glu Glu Val Glu 1235 1240 1245		
Pro Val Gly Leu Met Thr Gly Ser Gly Val Val Gly Val Lys Val 1250 1255 1260		
Pro Gln Phe Ser Phe Ser Arg Leu Ala Gly Ala Asp Val Val Leu 1265 1270 1275		
Gly Val Glu Met Thr Ser Thr Gly Glu Val Ala Gly Phe Gly Glu 1280 1285 1290		
Ser Arg Cys Glu Ala Tyr Leu Lys Ala Met Leu Ser Thr Gly Phe 1295 1300 1305		
Lys Ile Pro Lys Lys Asn Ile Leu Leu Thr Ile Gly Ser Tyr Lys 1310 1315 1320		
Asn Lys Ser Glu Leu Leu Pro Thr Val Arg Leu Leu Glu Ser Leu 1325 1330 1335		
Gly Tyr Ser Leu Tyr Ala Ser Leu Gly Thr Ala Asp Phe Tyr Thr 1340 1345 1350		
Glu His Gly Val Lys Val Thr Ala Val Asp Trp His Phe Glu Glu 1355 1360 1365		
Ala Val Asp Gly Glu Cys Pro Pro Gln Arg Ser Ile Leu Glu Gln 1370 1375 1380		

Leu Ala	Glu Lys Asn Phe	Glu	Leu Val Ile Asn	Leu	Ser Met Arg
1385		1390		1395	
Gly Ala	Gly Gly Arg Arg	Leu	Ser Ser Phe Val	Thr	Lys Gly Tyr
1400		1405		1410	
Arg Thr	Arg Arg Leu Ala	Ala	Asp Phe Ser Val	Pro	Leu Ile Ile
1415		1420		1425	
Asp Ile	Lys Cys Thr Lys	Leu	Phe Val Glu Ala	Leu	Gly Gln Ile
1430		1435		1440	
Gly Pro	Ala Pro Pro Leu	Lys	Val His Val Asp	Cys	Met Thr Ser
1445		1450		1455	
Gln Lys	Leu Val Arg Leu	Pro	Gly Leu Ile Asp	Val	His Val His
1460		1465		1470	
Leu Arg	Glu Pro Gly Gly	Thr	His Lys Glu Asp	Phe	Ala Ser Gly
1475		1480		1485	
Thr Ala	Ala Ala Leu Ala	Gly	Gly Ile Thr Met	Val	Cys Ala Met
1490		1495		1500	
Pro Asn	Thr Arg Pro Pro	Ile	Ile Asp Ala Pro	Ala	Leu Ala Leu
1505		1510		1515	
Ala Gln	Lys Leu Ala Glu	Ala	Gly Ala Arg Cys	Asp	Phe Ala Leu
1520		1525		1530	
Phe Leu	Gly Ala Ser Ser	Glu	Asn Ala Gly Thr	Leu	Gly Thr Val
1535		1540		1545	
Ala Gly	Ser Ala Ala Gly	Leu	Lys Leu Tyr Leu	Asn	Glu Thr Phe
1550		1555		1560	
Ser Glu	Leu Arg Leu Asp	Ser	Val Val Gln Trp	Met	Glu His Phe
1565		1570		1575	
Glu Thr	Trp Pro Ser His	Leu	Pro Ile Val Ala	His	Ala Glu Gln
1580		1585		1590	
Gln Thr	Val Ala Ala Val	Leu	Met Val Ala Gln	Leu	Thr Gln Arg
1595		1600		1605	



Ser	Val	His	Ile	Cys	His	Val	Ala	Arg	Lys	Glu	Glu	Val	Arg	Val
1610							1615					1620		
His	Leu	Arg	Ser	Cys	Cys	Pro	Cys	Cys	Phe	Pro	Ser	Asn	Thr	Lys
1625						1630					1635			
Gly	Gln	Val	Val	Leu	Arg	Gly	Arg	Arg	Gln	Gln	Glu	Glu	Ser	Leu
1640						1645					1650			
Glu	Thr	Ala	Gly	Gly	Gly	Ser	Arg	Ala	Ser	Thr	Leu	Ala	Gly	Leu
1655						1660					1665			
His	His	His	Phe	Phe	Glu	Gln	Gly	Cys	Trp	Pro	Leu	Gly	Leu	Cys
1670						1675					1680			
Val	Gly	Gln	Gly	Ile	Trp	Val	Val	Pro	Leu	Leu	Asp	Leu	Pro	Ile
1685						1690					1695			
Val	Pro	Gln	Ile	Leu	Leu	Ile	Lys	Ala	Ala	Lys	Ala	Arg	Gly	Leu
1700						1705					1710			
Pro	Val	Thr	Cys	Glu	Val	Ala	Pro	His	His	Leu	Phe	Leu	Ser	His
1715						1720					1725			
Asp	Asp	Leu	Glu	Arg	Leu	Gly	Pro	Gly	Lys	Gly	Glu	Val	Arg	Pro
1730						1735					1740			
Glu	Leu	Gly	Ser	Arg	Gln	Asp	Val	Glu	Ala	Leu	Trp	Glu	Asn	Met
1745						1750					1755			
Ala	Val	Ile	Asp	Cys	Phe	Ala	Ser	Asp	His	Ala	Pro	His	Thr	Leu
1760						1765					1770			
Glu	Glu	Lys	Cys	Gly	Ser	Arg	Pro	Pro	Pro	Gly	Phe	Pro	Gly	Leu
1775						1780					1785			
Glu	Thr	Met	Leu	Pro	Leu	Leu	Leu	Thr	Ala	Val	Ser	Glu	Gly	Arg
1790						1795					1800			
Leu	Ser	Leu	Asp	Asp	Leu	Leu	Gln	Arg	Leu	His	His	Asn	Pro	Arg
1805						1810					1815			
Arg	Ile	Phe	His	Leu	Pro	Pro	Gln	Glu	Asp	Thr	Tyr	Val	Glu	Val
1820						1825					1830			

Asp Leu	Glu His	Glu Trp	Thr	Ile Pro	Ser His	Met	Pro Phe	Ser
1835			1840			1845		
Lys Ala	His Trp	Thr Pro	Phe	Glu Gly	Gln Lys	Val	Lys Gly	Thr
1850			1855			1860		
Val Arg	Arg Val	Val Leu	Arg	Gly Glu	Val Ala	Tyr	Ile Asp	Gly
1865			1870			1875		
Gln Val	Leu Val	Pro Pro	Gly	Tyr Gly	Gln Asp	Val	Arg Lys	Trp
1880			1885			1890		
Pro Gln	Gly Ala	Val Pro	Gln	Leu Pro	Pro Ser	Ala	Pro Ala	Thr
1895			1900			1905		
Ser Glu	Met Thr	Thr Thr	Pro	Glu Arg	Pro Arg	Arg	Gly Ile	Pro
1910			1915			1920		
Gly Leu	Pro Asp	Gly Arg	Phe	His Leu	Pro Pro	Arg	Ile His	Arg
1925			1930			1935		
Ala Ser	Asp Pro	Gly Leu	Pro	Ala Glu	Glu Pro	Lys	Glu Lys	Ser
1940			1945			1950		
Ser Arg	Lys Val	Ala Glu	Pro	Glu Leu	Met Gly	Thr	Pro Asp	Gly
1955			1960			1965		
Thr Cys	Tyr Pro	Pro Pro	Pro	Val Pro	Arg Gln	Ala	Ser Pro	Gln
1970			1975			1980		
Asn Leu	Gly Thr	Pro Gly	Leu	Leu His	Pro Gln	Thr	Ser Pro	Leu
1985			1990			1995		
Leu His	Ser Leu	Val Gly	Gln	His Ile	Leu Ser	Val	Gln Gln	Phe
2000			2005			2010		
Thr Lys	Asp Gln	Met Ser	His	Leu Phe	Asn Val	Ala	His Thr	Leu
2015			2020			2025		
Arg Met	Met Val	Gln Lys	Glu	Arg Ser	Leu Asp	Ile	Leu Lys	Gly
2030			2035			2040		
Lys Val	Met Ala	Ser Met	Phe	Tyr Glu	Val Ser	Thr	Arg Thr	Ser
2045			2050			2055		
Ser Ser	Phe Ala	Ala Ala	Met	Ala Arg	Leu Gly	Gly	Ala Val	Leu

2060	2065	2070
Ser Phe 2075	Ser Glu Ala Thr Ser 2080	Ser Val Gln Lys Gly Glu Ser Leu 2085
Ala Asp 2090	Ser Val Gln Thr Met 2095	Ser Cys Tyr Ala Asp Val Val Val 2100
Leu Arg 2105	His Pro Gln Pro Gly 2110	Ala Val Glu Leu Ala Ala Lys His 2115
Cys Arg 2120	Arg Pro Val Ile Asn 2125	Ala Gly Asp Gly Val Gly Glu His 2130
Pro Thr 2135	Gln Ala Leu Leu Asp 2140	Ile Phe Thr Ile Arg Glu Glu Leu 2145
Gly Thr 2150	Val Asn Gly Met Thr 2155	Ile Thr Met Val Gly Asp Leu Lys 2160
His Gly 2165	Arg Thr Val His Ser 2170	Leu Ala Cys Leu Leu Thr Gln Tyr 2175
Arg Val 2180	Ser Leu Arg Tyr Val 2185	Ala Pro Pro Ser Leu Arg Met Pro 2190
Pro Thr 2195	Val Arg Ala Phe Val 2200	Ala Ser Arg Gly Thr Lys Gln Glu 2205
Glu Phe 2210	Glu Ser Ile Glu Glu 2215	Ala Leu Pro Asp Thr Asp Val Leu 2220
Tyr Met 2225	Thr Arg Ile Gln Lys 2230	Glu Arg Phe Gly Ser Thr Gln Glu 2235
Tyr Glu 2240	Ala Cys Phe Gly Gln 2245	Phe Ile Leu Thr Pro His Ile Met 2250
Thr Arg 2255	Ala Lys Lys Lys Met 2260	Val Val Met His Pro Met Pro Arg 2265
Val Asn 2270	Glu Ile Ser Val Glu 2275	Val Asp Ser Asp Pro Arg Ala Ala 2280
Tyr Phe 2285	Arg Gln Ala Glu Asn 2290	Gly Met Tyr Ile Arg Met Ala Leu 2295

Leu Ala Thr Val Leu Gly Arg Phe  
2300 2305

<210> 128  
<211> 1651  
<212> PRT  
<213> Homo sapien

<400> 128

Pro Pro Pro Leu Ser Ser Leu Pro Met Ala Ala Leu Val Leu Glu Asp  
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Gly Ser Val Leu Arg Gly Gln Pro Phe Gly Ala Ala Val Ser Thr Ala  
20 25 30

Gly Glu Val Val Phe Gln Thr Gly Met Val Gly Tyr Pro Glu Ala Leu  
35 40 45

Thr Asp Pro Ser Tyr Lys Ala Gln Ile Leu Val Leu Thr Tyr Pro Leu  
50 55 60

Ile Gly Asn Tyr Gly Ile Pro Pro Asp Glu Met Asp Glu Phe Gly Leu  
65 70 75 80

Cys Lys Trp Phe Glu Ser Ser Gly Ile His Val Ala Ala Leu Val Val  
85 90 95

Gly Glu Cys Cys Pro Thr Pro Ser His Trp Ser Ala Thr Arg Thr Leu  
100 105 110

His Glu Trp Leu Gln Gln His Gly Ile Pro Gly Leu Gln Gly Val Asp  
115 120 125

Thr Arg Glu Leu Thr Lys Lys Leu Arg Glu Gln Gly Ser Leu Leu Gly  
130 135 140

Lys Leu Val Gln Asn Gly Thr Glu Pro Ser Ser Leu Pro Phe Leu Asp  
145 150 155 160

Pro Asn Ala Arg Pro Leu Val Pro Glu Val Ser Ile Lys Thr Pro Arg  
165 170 175

Val Phe Asn Thr Gly Gly Ala Pro Arg Ile Leu Ala Leu Asp Cys Gly  
180 185 190

Leu Lys Tyr Asn Gln Ile Arg Cys Leu Cys Gln Arg Gly Ala Glu Val  
 195 200 205

Thr Val Val Pro Trp Asp His Ala Leu Asp Ser Gln Glu Tyr Glu Gly  
 210 215 220

Leu Phe Leu Ser Asn Gly Pro Gly Asp Pro Ala Ser Tyr Pro Ser Val  
 225 230 235 240

Val Ser Thr Leu Ser Arg Val Leu Ser Glu Pro Asn Pro Arg Pro Val  
 245 250 255

Phe Gly Ile Cys Leu Gly His Gln Leu Leu Ala Leu Ala Ile Gly Ala  
 260 265 270

Lys Thr Tyr Lys Met Arg Tyr Gly Asn Arg Gly His Asn Gln Pro Cys  
 275 280 285

Leu Leu Val Gly Ser Gly Arg Cys Phe Leu Thr Ser Gln Asn His Gly  
 290 295 300

Phe Ala Val Glu Thr Asp Ser Leu Pro Ala Asp Trp Ala Pro Leu Phe  
 305 310 315 320

Thr Asn Ala Asn Asp Gly Ser Asn Glu Gly Ile Val His Asn Ser Leu  
 325 330 335

Pro Phe Phe Ser Val Gln Phe His Pro Glu His Gln Ala Gly Pro Ser  
 340 345 350

Asp Met Glu Leu Leu Phe Asp Ile Phe Leu Glu Thr Val Lys Glu Ala  
 355 360 365

Thr Ala Gly Asn Pro Gly Gly Gln Thr Val Arg Glu Arg Leu Thr Glu  
 370 375 380

Arg Leu Cys Pro Pro Gly Ile Pro Thr Pro Gly Ser Gly Leu Pro Pro  
 385 390 395 400

Pro Arg Lys Val Leu Ile Leu Gly Ser Gly Gly Leu Ser Ile Gly Gln  
 405 410 415

Ala Gly Glu Phe Asp Tyr Ser Gly Ser Gln Ala Ile Lys Ala Leu Lys  
 420 425 430

Glu Glu Asn Ile Gln Thr Leu Leu Ile Asn Pro Asn Ile Ala Thr Val

435                                      440                                      445  
 Gln Thr Ser Gln Gly Leu Ala Asp Lys Val Tyr Phe Leu Pro Ile Thr  
 450                                      455                                      460  
 Pro His Tyr Val Thr Gln Val Ile Arg Asn Glu Arg Pro Asp Gly Val  
 465                                      470                                      475                                      480  
 Leu Leu Thr Phe Gly Gly Gln Thr Ala Leu Asn Cys Gly Val Glu Leu  
 485                                      490                                      495  
 Thr Lys Ala Gly Val Leu Ala Arg Tyr Gly Val Arg Val Leu Gly Thr  
 500                                      505                                      510  
 Thr Val Glu Thr Ile Glu Leu Thr Glu Asp Arg Arg Ala Phe Ala Ala  
 515                                      520                                      525  
 Arg Met Ala Glu Ile Gly Glu His Val Ala Pro Ser Glu Ala Gly Asn  
 530                                      535                                      540  
 Ser Leu Glu Gln Ala Gln Ala Ala Ala Glu Arg Leu Gly Tyr Pro Val  
 545                                      550                                      555                                      560  
 Leu Val Arg Ala Ala Phe Ala Val Gly Gly Leu Gly Ser Gly Phe Ala  
 565                                      570                                      575  
 Ser Asn Arg Glu Glu Leu Ser Ala Leu Val Ala Pro Ala Phe Ala His  
 580                                      585                                      590  
 Thr Ser Gln Val Leu Val Asp Lys Ser Leu Lys Gly Trp Lys Glu Ile  
 595                                      600                                      605  
 Glu Tyr Glu Val Val Arg Asp Ala Tyr Gly Asn Cys Val Thr Val Cys  
 610                                      615                                      620  
 Asn Met Glu Asn Leu Asp Pro Leu Gly Ile His Thr Gly Glu Ser Ile  
 625                                      630                                      635                                      640  
 Val Val Ala Pro Ser Gln Thr Leu Asn Asp Arg Glu Tyr Gln Leu Leu  
 645                                      650                                      655  
 Arg Gln Thr Ala Ile Lys Val Thr Gln His Leu Gly Ile Val Gly Glu  
 660                                      665                                      670  
 Cys Asn Val Gln Tyr Ala Leu Asn Pro Glu Ser Glu Gln Tyr Tyr Ile  
 675                                      680                                      685

Ile Glu Val Asn Ala Arg Leu Ser Arg Ser Ser Ala Leu Ala Ser Lys  
 690 695 700

Ala Thr Gly Tyr Pro Leu Ala Tyr Val Ala Ala Lys Leu Ala Leu Gly  
 705 710 715 720

Ile Pro Leu Pro Glu Leu Arg Asn Ser Val Thr Gly Gly Thr Ala Ala  
 725 730 735

Phe Glu Pro Ser Val Asp Tyr Cys Val Val Lys Ile Pro Arg Trp Asp  
 740 745 750

Leu Ser Lys Phe Leu Arg Val Ser Thr Lys Ile Gly Ser Cys Met Lys  
 755 760 765

Ser Val Gly Glu Val Met Gly Ile Gly Arg Ser Phe Glu Glu Ala Phe  
 770 775 780

Gln Lys Ala Leu Arg Met Val Asp Glu Asn Cys Val Gly Phe Asp His  
 785 790 795 800

Thr Val Lys Pro Val Ser Asp Met Glu Leu Glu Thr Pro Thr Asp Lys  
 805 810 815

Arg Ile Phe Val Val Ala Ala Ala Leu Trp Ala Gly Tyr Ser Val Asp  
 820 825 830

Arg Leu Tyr Glu Leu Thr Arg Ile Asp Arg Trp Phe Leu His Arg Met  
 835 840 845

Lys Arg Ile Ile Ala His Ala Gln Leu Leu Glu Gln His Arg Gly Gln  
 850 855 860

Pro Leu Pro Pro Asp Leu Leu Gln Gln Ala Lys Cys Leu Gly Phe Ser  
 865 870 875 880

Asp Lys Gln Ile Ala Leu Ala Val Leu Ser Thr Glu Leu Ala Val Arg  
 885 890 895

Lys Leu Arg Gln Glu Leu Gly Ile Cys Pro Ala Val Lys Gln Ile Asp  
 900 905 910

Thr Val Ala Ala Glu Trp Pro Ala Gln Thr Asn Tyr Leu Tyr Leu Thr  
 915 920 925

Tyr Trp Gly Thr Thr His Asp Leu Thr Phe Arg Thr Pro His Val Leu  
 930 935 940

Val Leu Gly Ser Gly Val Tyr Arg Ile Gly Ser Ser Val Glu Phe Asp  
 945 950 955 960

Trp Cys Ala Val Gly Cys Ile Gln Gln Leu Arg Lys Met Gly Tyr Lys  
 965 970 975

Thr Ile Met Val Asn Tyr Asn Pro Glu Thr Val Ser Thr Asp Tyr Asp  
 980 985 990

Met Cys Asp Arg Leu Tyr Phe Asp Glu Ile Ser Phe Glu Val Val Met  
 995 1000 1005

Asp Ile Tyr Glu Leu Glu Asn Pro Glu Gly Val Ile Leu Ser Met  
 1010 1015 1020

Gly Gly Gln Leu Pro Asn Asn Met Ala Met Ala Leu His Arg Gln  
 1025 1030 1035

Gln Cys Arg Val Leu Gly Thr Ser Pro Glu Ala Ile Asp Ser Ala  
 1040 1045 1050

Glu Asn Arg Phe Lys Phe Ser Arg Leu Leu Asp Thr Ile Gly Ile  
 1055 1060 1065

Ser Gln Pro Gln Trp Arg Glu Leu Ser Asp Leu Glu Ser Ala Arg  
 1070 1075 1080

Gln Phe Cys Gln Thr Val Gly Tyr Pro Cys Val Val Arg Pro Ser  
 1085 1090 1095

Tyr Val Leu Ser Gly Ala Ala Met Asn Val Ala Tyr Thr Asp Gly  
 1100 1105 1110

Asp Leu Glu Arg Phe Leu Ser Ser Ala Ala Ala Val Ser Lys Glu  
 1115 1120 1125

His Pro Val Val Ile Ser Lys Phe Ile Gln Glu Ala Lys Glu Ile  
 1130 1135 1140

Asp Val Asp Ala Val Ala Ser Asp Gly Val Val Ala Ala Ile Ala  
 1145 1150 1155



Ile Ser Glu His Val Glu Asn Ala Gly Val His Ser Gly Asp Ala  
 1160 1165 1170

Thr Leu Val Thr Pro Pro Gln Asp Ile Thr Ala Lys Thr Leu Glu  
 1175 1180 1185

Arg Ile Lys Ala Ile Val His Ala Val Gly Gln Glu Leu Gln Val  
 1190 1195 1200

Thr Gly Pro Phe Asn Leu Gln Leu Ile Ala Lys Asp Asp Gln Leu  
 1205 1210 1215

Lys Val Ile Glu Cys Asn Val Arg Val Ser Arg Ser Phe Pro Phe  
 1220 1225 1230

Val Ser Lys Thr Leu Gly Val Asp Leu Val Ala Leu Ala Thr Arg  
 1235 1240 1245

Val Ile Met Gly Glu Glu Val Glu Pro Val Gly Leu Met Thr Gly  
 1250 1255 1260

Ser Gly Val Val Gly Val Lys Val Pro Gln Phe Ser Phe Ser Arg  
 1265 1270 1275

Leu Ala Gly Ala Asp Val Val Leu Gly Val Glu Met Thr Ser Thr  
 1280 1285 1290

Gly Glu Val Ala Gly Phe Gly Glu Ser Arg Cys Glu Ala Tyr Leu  
 1295 1300 1305

Lys Ala Met Leu Ser Thr Gly Phe Lys Ile Pro Lys Lys Asn Ile  
 1310 1315 1320

Leu Leu Thr Ile Gly Ser Tyr Lys Asn Lys Ser Glu Leu Leu Pro  
 1325 1330 1335

Thr Val Arg Leu Leu Glu Ser Leu Gly Tyr Ser Leu Tyr Ala Ser  
 1340 1345 1350

Leu Gly Thr Ala Asp Phe Tyr Thr Glu His Gly Val Lys Val Thr  
 1355 1360 1365

Ala Val Asp Trp His Phe Glu Glu Ala Val Asp Gly Glu Cys Pro  
 1370 1375 1380

Pro Gln Arg Ser Ile Leu Glu Gln Leu Ala Glu Lys Asn Phe Glu

1385		1390		1395
Leu Val 1400	Ile Asn Leu Ser Met	Arg Gly Ala Gly Gly	Arg Arg Leu	
		1405	1410	
Ser Ser 1415	Phe Val Thr Lys Gly	Tyr Arg Thr Arg Arg	Leu Ala Ala	
		1420	1425	
Asp Phe 1430	Ser Val Pro Leu Ile	Ile Asp Ile Lys Cys	Thr Lys Leu	
		1435	1440	
Phe Val 1445	Glu Ala Leu Gly Gln	Ile Gly Pro Ala Pro	Pro Leu Lys	
		1450	1455	
Val His 1460	Val Asp Cys Met Thr	Ser Gln Lys Leu Val	Arg Leu Pro	
		1465	1470	
Gly Leu 1475	Ile Asp Val His Val	His Leu Arg Glu Pro	Gly Gly Thr	
		1480	1485	
His Lys 1490	Glu Asp Phe Ala Ser	Gly Thr Ala Ala Ala	Leu Ala Gly	
		1495	1500	
Gly Ile 1505	Thr Met Val Cys Ala	Met Pro Asn Thr Arg	Pro Pro Ile	
		1510	1515	
Ile Asp 1520	Ala Pro Ala Leu Ala	Leu Ala Gln Lys Leu	Ala Glu Ala	
		1525	1530	
Gly Ala 1535	Arg Cys Asp Phe Ala	Leu Phe Leu Gly Ala	Ser Ser Glu	
		1540	1545	
Asn Ala 1550	Gly Thr Leu Gly Thr	Val Ala Gly Ser Ala	Ala Gly Leu	
		1555	1560	
Lys Leu 1565	Tyr Leu Asn Glu Thr	Phe Ser Glu Leu Arg	Leu Asp Ser	
		1570	1575	
Val Val 1580	Gln Trp Met Glu His	Phe Glu Thr Trp Pro	Ser His Leu	
		1585	1590	
Pro Ile 1595	Val Ala His Ala Glu	Gln Gln Thr Val Ala	Ala Val Leu	
		1600	1605	
Met Val 1610	Ala Gln Leu Thr Gln	Arg Ser Val His Ile	Cys His Val	
		1615	1620	

Ala Arg Lys Glu Glu Val Arg Val His Leu Arg Ser Cys Cys Pro  
 1625 1630 1635

Cys Cys Phe Pro Ser Asn Thr Lys Gly Gln Gly Ser Pro  
 1640 1645 1650

<210> 129  
 <211> 2242  
 <212> PRT  
 <213> Homo sapien

<400> 129

Met Ala Ala Leu Val Leu Glu Asp Gly Ser Val Leu Arg Gly Gln Pro  
 1 5 10 15

Phe Gly Ala Ala Val Ser Thr Ala Gly Glu Val Val Phe Gln Thr Gly  
 20 25 30

Met Val Gly Tyr Pro Glu Ala Leu Thr Asp Pro Ser Tyr Lys Ala Gln  
 35 40 45

Ile Leu Val Leu Thr Tyr Pro Leu Ile Gly Asn Tyr Gly Ile Pro Pro  
 50 55 60

Asp Glu Met Asp Glu Phe Gly Leu Cys Lys Trp Phe Glu Ser Ser Gly  
 65 70 75 80

Ile His Val Ala Ala Leu Val Val Gly Glu Cys Cys Pro Thr Pro Ser  
 85 90 95

His Trp Ser Ala Thr Arg Thr Leu His Glu Trp Leu Gln Gln His Gly  
 100 105 110

Ile Pro Gly Leu Gln Gly Val Asp Thr Arg Glu Leu Thr Lys Lys Leu  
 115 120 125

Arg Glu Gln Gly Ser Leu Leu Gly Lys Leu Val Gln Asn Gly Thr Glu  
 130 135 140

Pro Ser Ser Leu Pro Phe Leu Asp Pro Asn Ala Arg Pro Leu Val Pro  
 145 150 155 160

Glu Val Ser Ile Lys Thr Pro Arg Val Phe Asn Thr Gly Gly Ala Pro  
 165 170 175

Arg Ile Leu Ala Leu Asp Cys Gly Leu Lys Tyr Asn Gln Ile Arg Cys  
 180 185 190

Leu Cys Gln Arg Gly Ala Glu Val Thr Val Val Pro Trp Asp His Ala  
 195 200 205

Leu Asp Ser Gln Glu Tyr Glu Gly Leu Phe Leu Ser Asn Gly Pro Gly  
 210 215 220

Asp Pro Ala Ser Tyr Pro Ser Val Val Ser Thr Leu Ser Arg Val Leu  
 225 230 235 240

Ser Glu Pro Asn Pro Arg Pro Val Phe Gly Ile Cys Leu Gly His Gln  
 245 250 255

Leu Leu Ala Leu Ala Ile Gly Ala Lys Thr Tyr Lys Met Arg Tyr Gly  
 260 265 270

Asn Arg Gly His Asn Gln Pro Cys Leu Leu Val Gly Ser Gly Arg Cys  
 275 280 285

Phe Leu Thr Ser Gln Asn His Gly Phe Ala Val Glu Thr Asp Ser Leu  
 290 295 300

Pro Ala Asp Trp Ala Pro Leu Phe Thr Asn Ala Asn Asp Gly Ser Asn  
 305 310 315 320

Glu Gly Ile Val His Asn Ser Leu Pro Phe Phe Ser Val Gln Phe His  
 325 330 335

Pro Glu His Gln Ala Gly Pro Ser Asp Met Glu Leu Leu Phe Asp Ile  
 340 345 350

Phe Leu Glu Thr Val Lys Glu Ala Thr Ala Gly Asn Pro Gly Gly Gln  
 355 360 365

Thr Val Arg Glu Arg Leu Thr Glu Arg Leu Cys Pro Pro Gly Ile Pro  
 370 375 380

Thr Pro Gly Ser Gly Leu Pro Pro Pro Arg Lys Val Leu Ile Leu Gly  
 385 390 395 400

Ser Gly Gly Leu Ser Ile Gly Gln Ala Gly Glu Phe Asp Tyr Ser Gly  
 405 410 415

Ser Gln Ala Ile Lys Ala Leu Lys Glu Glu Asn Ile Gln Thr Leu Leu

420	425	430
Ile Asn Pro Asn Ile Ala Thr Val Gln Thr Ser Gln Gly Leu Ala Asp 435 440 445		
Lys Val Tyr Phe Leu Pro Ile Thr Pro His Tyr Val Thr Gln Val Ile 450 455 460		
Arg Asn Glu Arg Pro Asp Gly Val Leu Leu Thr Phe Gly Gly Gln Thr 465 470 475 480		
Ala Leu Asn Cys Gly Val Glu Leu Thr Lys Ala Gly Val Leu Ala Arg 485 490 495		
Tyr Gly Val Arg Val Leu Gly Thr Thr Val Glu Thr Ile Glu Leu Thr 500 505 510		
Glu Asp Arg Arg Ala Phe Ala Ala Arg Met Ala Glu Ile Gly Glu His 515 520 525		
Val Ala Pro Ser Glu Ala Gly Asn Ser Leu Glu Gln Ala Gln Ala Ala 530 535 540		
Ala Glu Arg Leu Gly Tyr Pro Val Leu Val Arg Ala Ala Phe Ala Val 545 550 555 560		
Gly Gly Leu Gly Ser Gly Phe Ala Ser Asn Arg Glu Glu Leu Ser Ala 565 570 575		
Leu Val Ala Pro Ala Phe Ala His Thr Ser Gln Val Leu Val Asp Lys 580 585 590		
Ser Leu Lys Gly Trp Lys Glu Ile Glu Tyr Glu Val Val Arg Asp Ala 595 600 605		
Tyr Gly Asn Cys Val Thr Val Cys Asn Met Glu Asn Leu Asp Pro Leu 610 615 620		
Gly Ile His Thr Gly Glu Ser Ile Val Val Ala Pro Ser Gln Thr Leu 625 630 635 640		
Asn Asp Arg Glu Tyr Gln Leu Leu Arg Gln Thr Ala Ile Lys Val Thr 645 650 655		
Gln His Leu Gly Ile Val Gly Glu Cys Asn Val Gln Tyr Ala Leu Asn 660 665 670		

Pro Glu Ser Glu Gln Tyr Tyr Ile Ile Glu Val Asn Ala Arg Leu Ser  
675 680 685

Arg Ser Ser Ala Leu Ala Ser Lys Ala Thr Gly Tyr Pro Leu Ala Tyr  
690 695 700

Val Ala Ala Lys Leu Ala Leu Gly Ile Pro Leu Pro Glu Leu Arg Asn  
705 710 715 720

Ser Val Thr Gly Gly Thr Ala Ala Phe Glu Pro Ser Val Asp Tyr Cys  
725 730 735

Val Val Lys Ile Pro Arg Trp Asp Leu Ser Lys Phe Leu Arg Val Ser  
740 745 750

Thr Lys Ile Gly Ser Cys Met Lys Ser Val Gly Glu Val Met Gly Ile  
755 760 765

Gly Arg Ser Phe Glu Glu Ala Phe Gln Lys Ala Leu Arg Met Val Asp  
770 775 780

Glu Asn Cys Val Gly Phe Asp His Thr Val Lys Pro Val Ser Asp Met  
785 790 795 800

Glu Leu Glu Thr Pro Thr Asp Lys Arg Ile Phe Val Val Ala Ala Ala  
805 810 815

Leu Trp Ala Gly Tyr Ser Val Asp Arg Leu Tyr Glu Leu Thr Arg Ile  
820 825 830

Asp Arg Trp Phe Leu His Arg Met Lys Arg Ile Ile Ala His Ala Gln  
835 840 845

Leu Leu Glu Gln His Arg Gly Gln Pro Leu Pro Pro Asp Leu Leu Gln  
850 855 860

Gln Ala Lys Cys Leu Gly Phe Ser Asp Lys Gln Ile Ala Leu Ala Val  
865 870 875 880

Leu Ser Thr Glu Leu Ala Val Arg Lys Leu Arg Gln Glu Leu Gly Ile  
885 890 895

Cys Pro Ala Val Lys Gln Ile Asp Thr Val Ala Ala Glu Trp Pro Ala  
900 905 910

Gln Thr Asn Tyr Leu Tyr Leu Thr Tyr Trp Gly Thr Thr His Asp Leu  
915 920 925

Thr Phe Arg Thr Pro His Val Leu Val Leu Gly Ser Gly Val Tyr Arg  
930 935 940

Ile Gly Ser Ser Val Glu Phe Asp Trp Cys Ala Val Gly Cys Ile Gln  
945 950 955 960

Gln Leu Arg Lys Met Gly Tyr Lys Thr Ile Met Val Asn Tyr Asn Pro  
965 970 975

Glu Thr Val Ser Thr Asp Tyr Asp Met Cys Asp Arg Leu Tyr Phe Asp  
980 985 990

Glu Ile Ser Phe Glu Val Val Met Asp Ile Tyr Glu Leu Glu Asn Pro  
995 1000 1005

Glu Gly Val Ile Leu Ser Met Gly Gly Gln Leu Pro Asn Asn Met  
1010 1015 1020

Ala Met Ala Leu His Arg Gln Gln Cys Arg Val Leu Gly Thr Ser  
1025 1030 1035

Pro Glu Ala Ile Asp Ser Ala Glu Asn Arg Phe Lys Phe Ser Arg  
1040 1045 1050

Leu Leu Asp Thr Ile Gly Ile Ser Gln Pro Gln Trp Arg Glu Leu  
1055 1060 1065

Ser Asp Leu Glu Ser Ala Arg Gln Phe Cys Gln Thr Val Gly Tyr  
1070 1075 1080

Pro Cys Val Val Arg Pro Ser Tyr Val Leu Ser Gly Ala Ala Met  
1085 1090 1095

Asn Val Ala Tyr Thr Asp Gly Asp Leu Glu Arg Phe Leu Ser Ser  
1100 1105 1110

Ala Ala Ala Val Ser Lys Glu His Pro Val Val Ile Ser Lys Phe  
1115 1120 1125

Ile Gln Glu Ala Lys Glu Ile Asp Val Asp Ala Val Ala Ser Asp  
1130 1135 1140

Gly Val Val Ala Ala Ile Ala Ile Ser Glu His Val Glu Asn Ala  
 1145 1150 1155

Gly Val His Ser Gly Asp Ala Thr Leu Val Thr Pro Pro Gln Asp  
 1160 1165 1170

Ile Thr Ala Lys Thr Leu Glu Arg Ile Lys Ala Ile Val His Ala  
 1175 1180 1185

Val Gly Gln Glu Leu Gln Val Thr Gly Pro Phe Asn Leu Gln Leu  
 1190 1195 1200

Ile Ala Lys Asp Asp Gln Leu Lys Val Ile Glu Cys Asn Val Arg  
 1205 1210 1215

Val Ser Arg Ser Phe Pro Phe Val Ser Lys Thr Leu Gly Val Asp  
 1220 1225 1230

Leu Val Ala Leu Ala Thr Arg Val Ile Met Gly Glu Glu Val Glu  
 1235 1240 1245

Pro Val Gly Leu Met Thr Gly Ser Gly Val Val Gly Val Lys Val  
 1250 1255 1260

Pro Gln Phe Ser Phe Ser Arg Leu Ala Gly Ala Asp Val Val Leu  
 1265 1270 1275

Gly Val Glu Met Thr Ser Thr Gly Glu Val Ala Gly Phe Gly Glu  
 1280 1285 1290

Ser Arg Cys Glu Ala Tyr Leu Lys Ala Met Leu Ser Thr Gly Phe  
 1295 1300 1305

Lys Ile Pro Lys Lys Asn Ile Leu Leu Thr Ile Gly Ser Tyr Lys  
 1310 1315 1320

Asn Lys Ser Glu Leu Leu Pro Thr Val Arg Leu Leu Glu Ser Leu  
 1325 1330 1335

Gly Tyr Ser Leu Tyr Ala Ser Leu Gly Thr Ala Asp Phe Tyr Thr  
 1340 1345 1350

Glu His Gly Val Lys Val Thr Ala Val Asp Trp His Phe Glu Glu  
 1355 1360 1365

Ala Val Asp Gly Glu Cys Pro Pro Gln Arg Ser Ile Leu Glu Gln



1370	1375	1380
Leu Ala 1385	Glu Lys Asn Phe Glu 1390	Leu Val Ile Asn Leu Ser Met Arg 1395
Gly Ala 1400	Gly Gly Arg Arg Leu 1405	Ser Ser Phe Val Thr Lys Gly Tyr 1410
Arg Thr 1415	Arg Arg Leu Ala Ala 1420	Asp Phe Ser Val Pro Leu Ile Ile 1425
Asp Ile 1430	Lys Cys Thr Lys Leu 1435	Phe Val Glu Ala Leu Gly Gln Ile 1440
Gly Pro 1445	Ala Pro Pro Leu Lys 1450	Val His Val Asp Cys Met Thr Ser 1455
Gln Lys 1460	Leu Val Arg Leu Pro 1465	Gly Leu Ile Asp Val His Val His 1470
Leu Arg 1475	Glu Pro Gly Gly Thr 1480	His Lys Glu Asp Phe Ala Ser Gly 1485
Thr Ala 1490	Ala Ala Leu Ala Gly 1495	Gly Ile Thr Met Val Cys Ala Met 1500
Pro Asn 1505	Thr Arg Pro Pro Ile 1510	Ile Asp Ala Pro Ala Leu Ala Leu 1515
Ala Gln 1520	Lys Leu Ala Glu Ala 1525	Gly Ala Arg Cys Asp Phe Ala Leu 1530
Phe Leu 1535	Gly Ala Ser Ser Glu 1540	Asn Ala Gly Thr Leu Gly Thr Val 1545
Ala Gly 1550	Ser Ala Ala Gly Leu 1555	Lys Leu Tyr Leu Asn Glu Thr Phe 1560
Ser Glu 1565	Leu Arg Leu Asp Ser 1570	Val Val Gln Trp Met Glu His Phe 1575
Glu Thr 1580	Trp Pro Ser His Leu 1585	Pro Ile Val Ala His Ala Glu Gln 1590
Gln Thr 1595	Val Ala Ala Val Leu 1600	Met Val Ala Gln Leu Thr Gln Arg 1605

Ser Val	His Ile Cys His Val	Ala Arg Lys Glu Glu	Ile Leu Leu
1610	1615	1620	
Ile Lys	Ala Ala Lys Ala Arg	Gly Leu Pro Val Thr	Cys Glu Val
1625	1630	1635	
Ala Pro	His His Leu Phe Leu	Ser His Asp Asp Leu	Glu Arg Leu
1640	1645	1650	
Gly Pro	Gly Lys Gly Glu Val	Arg Pro Glu Leu Gly	Ser Arg Gln
1655	1660	1665	
Asp Val	Glu Ala Leu Trp Glu	Asn Met Ala Val Ile	Asp Cys Phe
1670	1675	1680	
Ala Ser	Asp His Ala Pro His	Thr Leu Glu Glu Lys	Cys Gly Ser
1685	1690	1695	
Arg Pro	Pro Pro Gly Phe Pro	Gly Leu Glu Thr Met	Leu Pro Leu
1700	1705	1710	
Leu Leu	Thr Ala Val Ser Glu	Gly Arg Leu Ser Leu	Asp Asp Leu
1715	1720	1725	
Leu Gln	Arg Leu His His Asn	Pro Arg Arg Ile Phe	His Leu Pro
1730	1735	1740	
Pro Gln	Glu Asp Thr Tyr Val	Glu Val Asp Leu Glu	His Glu Trp
1745	1750	1755	
Thr Ile	Pro Ser His Met Pro	Phe Ser Lys Ala His	Trp Thr Pro
1760	1765	1770	
Phe Glu	Gly Gln Lys Val Lys	Gly Thr Val Arg Arg	Val Val Leu
1775	1780	1785	
Arg Gly	Glu Val Ala Tyr Ile	Asp Gly Gln Val Leu	Val Pro Pro
1790	1795	1800	
Gly Tyr	Gly Gln Asp Val Arg	Lys Trp Pro Gln Gly	Ala Val Pro
1805	1810	1815	
Gln Leu	Pro Pro Ser Ala Pro	Ala Thr Ser Glu Met	Thr Thr Thr
1820	1825	1830	

Pro	Glu	Arg	Pro	Arg	Arg	Gly	Ile	Pro	Gly	Leu	Pro	Asp	Gly	Arg
1835						1840					1845			
Phe	His	Leu	Pro	Pro	Arg	Ile	His	Arg	Ala	Ser	Asp	Pro	Gly	Leu
1850						1855					1860			
Pro	Ala	Val	Phe	Leu	Arg	Pro	Gly	Ala	Gly	Ile	Pro	Arg	Gly	Ser
1865						1870					1875			
Arg	Ala	Trp	Ala	Glu	Glu	Pro	Lys	Glu	Lys	Ser	Ser	Arg	Lys	Val
1880						1885					1890			
Ala	Glu	Pro	Glu	Leu	Met	Gly	Thr	Pro	Asp	Gly	Thr	Cys	Tyr	Pro
1895						1900					1905			
Pro	Pro	Pro	Val	Pro	Arg	Gln	Ala	Ser	Pro	Gln	Asn	Leu	Gly	Thr
1910						1915					1920			
Pro	Gly	Leu	Leu	His	Pro	Gln	Thr	Ser	Pro	Leu	Leu	His	Ser	Leu
1925						1930					1935			
Val	Gly	Gln	His	Ile	Leu	Ser	Val	Gln	Gln	Phe	Thr	Lys	Asp	Gln
1940						1945					1950			
Met	Ser	His	Leu	Phe	Asn	Val	Ala	His	Thr	Leu	Arg	Met	Met	Val
1955						1960					1965			
Gln	Lys	Glu	Arg	Ser	Leu	Asp	Ile	Leu	Lys	Gly	Lys	Val	Met	Ala
1970						1975					1980			
Ser	Met	Phe	Tyr	Glu	Val	Ser	Thr	Arg	Thr	Ser	Ser	Ser	Phe	Ala
1985						1990					1995			
Ala	Ala	Met	Ala	Arg	Leu	Gly	Gly	Ala	Val	Leu	Ser	Phe	Ser	Glu
2000						2005					2010			
Ala	Thr	Ser	Ser	Val	Gln	Lys	Gly	Glu	Ser	Leu	Ala	Asp	Ser	Val
2015						2020					2025			
Gln	Thr	Met	Ser	Cys	Tyr	Ala	Asp	Val	Val	Val	Leu	Arg	His	Pro
2030						2035					2040			
Gln	Pro	Gly	Ala	Val	Glu	Leu	Ala	Ala	Lys	His	Cys	Arg	Arg	Pro
2045						2050					2055			

Val Ile Asn Ala Gly Asp Gly Val Gly Glu His Pro Thr Gln Ala  
 2060 2065 2070  
 Leu Leu Asp Ile Phe Thr Ile Arg Glu Glu Leu Gly Thr Val Asn  
 2075 2080 2085  
 Gly Met Thr Ile Thr Met Val Gly Asp Leu Lys His Gly Arg Thr  
 2090 2095 2100  
 Val His Ser Leu Ala Cys Leu Leu Thr Gln Tyr Arg Val Ser Leu  
 2105 2110 2115  
 Arg Tyr Val Ala Pro Pro Ser Leu Arg Met Pro Pro Thr Val Arg  
 2120 2125 2130  
 Ala Phe Val Ala Ser Arg Gly Thr Lys Gln Glu Glu Phe Glu Ser  
 2135 2140 2145  
 Ile Glu Glu Ala Leu Pro Asp Thr Asp Val Leu Tyr Met Thr Arg  
 2150 2155 2160  
 Ile Gln Lys Glu Arg Phe Gly Ser Thr Gln Glu Tyr Glu Ala Cys  
 2165 2170 2175  
 Phe Gly Gln Phe Ile Leu Thr Pro His Ile Met Thr Arg Ala Lys  
 2180 2185 2190  
 Lys Lys Met Val Val Met His Pro Met Pro Arg Val Asn Glu Ile  
 2195 2200 2205  
 Ser Val Glu Val Asp Ser Asp Pro Arg Ala Ala Tyr Phe Arg Gln  
 2210 2215 2220  
 Ala Glu Asn Gly Met Tyr Ile Arg Met Ala Leu Leu Ala Thr Val  
 2225 2230 2235  
 Leu Gly Arg Phe  
 2240  
 <210> 130  
 <211> 371  
 <212> PRT  
 <213> Homo sapien  
 <400> 130  
 Met Tyr Ile Cys Pro Leu Val Leu Phe Ala Ala Glu Glu Pro Lys Glu  
 1 5 10 15

Lys Ser Ser Arg Lys Val Ala Glu Pro Glu Leu Met Gly Thr Pro Asp  
 20 25 30

Gly Thr Cys Tyr Pro Pro Pro Pro Val Pro Arg Gln Ala Ser Pro Gln  
 35 40 45

Asn Leu Gly Thr Pro Gly Leu Leu His Pro Gln Thr Ser Pro Leu Leu  
 50 55 60

His Ser Leu Val Gly Gln His Ile Leu Ser Val Gln Gln Phe Thr Lys  
 65 70 75 80

Asp Gln Met Ser His Leu Phe Asn Val Ala His Thr Leu Arg Met Met  
 85 90 95

Val Gln Lys Glu Arg Ser Leu Asp Ile Leu Lys Gly Lys Val Met Ala  
 100 105 110

Ser Met Phe Tyr Glu Val Ser Thr Arg Thr Ser Ser Ser Phe Ala Ala  
 115 120 125

Ala Met Ala Arg Leu Gly Gly Ala Val Leu Ser Phe Ser Glu Ala Thr  
 130 135 140

Ser Ser Val Gln Lys Gly Glu Ser Leu Ala Asp Ser Val Gln Thr Met  
 145 150 155 160

Ser Cys Tyr Ala Asp Val Val Val Leu Arg His Pro Gln Pro Gly Ala  
 165 170 175

Val Glu Leu Ala Ala Lys His Cys Arg Arg Pro Val Ile Asn Ala Gly  
 180 185 190

Asp Gly Val Gly Glu His Pro Thr Gln Ala Leu Leu Asp Ile Phe Thr  
 195 200 205

Ile Arg Glu Glu Leu Gly Thr Val Asn Gly Met Thr Ile Thr Met Val  
 210 215 220

Gly Asp Leu Lys His Gly Arg Thr Val His Ser Leu Ala Cys Leu Leu  
 225 230 235 240

Thr Gln Tyr Arg Val Ser Leu Arg Tyr Val Ala Pro Pro Ser Leu Arg  
 245 250 255

Met Pro Pro Thr Val Arg Ala Phe Val Ala Ser Arg Gly Thr Lys Gln  
                           260                          265                          270

Glu Glu Phe Glu Ser Ile Glu Glu Ala Leu Pro Asp Thr Asp Val Leu  
                           275                          280                          285

Tyr Met Thr Arg Ile Gln Lys Glu Arg Phe Gly Ser Thr Gln Glu Tyr  
                           290                          295                          300

Glu Ala Cys Phe Gly Gln Phe Ile Leu Thr Pro His Ile Met Thr Arg  
                           305                          310                          315                          320

Ala Lys Lys Lys Met Val Val Met His Pro Met Pro Arg Val Asn Glu  
                           325                          330                          335

Ile Ser Val Glu Val Asp Ser Asp Pro Arg Ala Ala Tyr Phe Arg Gln  
                           340                          345                          350

Ala Glu Asn Gly Met Tyr Ile Arg Met Ala Leu Leu Ala Thr Val Leu  
                           355                          360                          365

Gly Arg Phe  
                           370

<210> 131  
 <211> 970  
 <212> PRT  
 <213> Homo sapien

<400> 131

Met Ala Gly Ala Leu Ala Gly Leu Ala Ala Gly Leu Gln Val Pro Arg  
   1                          5                          10                          15

Val Ala Pro Ser Pro Asp Ser Asp Ser Asp Thr Asp Ser Glu Asp Pro  
                           20                          25                          30

Ser Leu Arg Arg Ser Ala Gly Gly Leu Leu Arg Ser Gln Val Ile His  
                           35                          40                          45

Ser Gly His Phe Met Val Ser Ser Pro His Ser Asp Ser Leu Pro Arg  
                           50                          55                          60

Arg Arg Asp Gln Glu Gly Ser Val Gly Pro Ser Asp Phe Gly Pro Arg  
                           65                          70                          75                          80

Ser Ile Asp Pro Thr Leu Thr Arg Leu Phe Glu Cys Leu Ser Leu Ala

85	90	95
Tyr Ser Gly Lys Leu Val Ser Pro Lys Trp Lys Asn Phe Lys Gly Leu		
100	105	110
Lys Leu Leu Cys Arg Asp Lys Ile Arg Leu Asn Asn Ala Ile Trp Arg		
115	120	125
Ala Trp Tyr Ile Gln Tyr Val Lys Arg Arg Lys Ser Pro Val Cys Gly		
130	135	140
Phe Val Thr Pro Leu Gln Gly Pro Glu Ala Asp Ala His Arg Lys Pro		
145	150	155
Glu Ala Val Val Leu Glu Gly Asn Tyr Trp Lys Arg Arg Ile Glu Val		
165	170	175
Val Met Arg Glu Tyr His Lys Trp Arg Ile Tyr Tyr Lys Lys Arg Val		
180	185	190
Ser Gly Gly Gly Pro Gly Arg Pro Gln Ser Phe Pro Pro Ala Ala Ala		
195	200	205
Gly Tyr Arg Pro Pro Arg Lys Ile Pro Gly Lys Gly Ile Leu Thr Pro		
210	215	220
Glu Leu Ala Pro Leu Gly Pro Ser Ile Gln Ser Arg Ala Asp Ser Ala		
225	230	235
Thr Val Trp Pro Gln Arg Leu Leu Ala Ala Ser Leu Pro Arg Gly Arg		
245	250	255
Leu Arg Lys Pro Ser Arg Glu Asp Asp Leu Leu Ala Pro Lys Gln Ala		
260	265	270
Glu Gly Arg Trp Pro Pro Pro Glu Gln Trp Cys Lys Gln Leu Phe Ser		
275	280	285
Ser Val Val Pro Val Leu Leu Gly Asp Pro Glu Glu Glu Pro Gly Gly		
290	295	300
Arg Gln Leu Leu Asp Leu Asn Cys Phe Leu Ser Asp Ile Ser Asp Thr		
305	310	315
Leu Phe Thr Met Thr Gln Ser Gly Pro Ser Pro Leu Gln Leu Pro Pro		
325	330	335

Glu Asp Ala Tyr Val Gly Asn Ala Asp Met Ile Gln Pro Asp Leu Thr  
 340 345 350

Pro Leu Gln Pro Ser Leu Asp Asp Phe Met Asp Ile Ser Asp Phe Phe  
 355 360 365

Thr Asn Ser Arg Leu Pro Gln Pro Pro Met Pro Ser Asn Phe Pro Glu  
 370 375 380

Pro Pro Ser Phe Ser Pro Val Val Asp Ser Leu Phe Ser Ser Gly Thr  
 385 390 395 400

Leu Gly Pro Glu Val Pro Pro Ala Ser Ser Ala Met Thr His Leu Ser  
 405 410 415

Gly His Ser Arg Leu Gln Ala Arg Asn Ser Cys Pro Gly Pro Leu Asp  
 420 425 430

Ser Ser Ala Phe Leu Ser Ser Asp Phe Leu Leu Pro Glu Asp Pro Lys  
 435 440 445

Pro Arg Leu Pro Pro Pro Val Pro Pro Pro Leu Leu His Tyr Pro  
 450 455 460

Pro Pro Ala Lys Val Pro Gly Leu Glu Pro Cys Pro Pro Pro Phe  
 465 470 475 480

Pro Pro Met Ala Pro Pro Thr Ala Leu Leu Gln Glu Glu Pro Leu Phe  
 485 490 495

Ser Pro Arg Phe Pro Phe Pro Thr Val Pro Pro Ala Pro Gly Val Ser  
 500 505 510

Pro Leu Pro Ala Pro Ala Ala Phe Pro Pro Thr Pro Gln Ser Val Pro  
 515 520 525

Ser Pro Ala Pro Thr Pro Phe Pro Ile Glu Leu Leu Pro Leu Gly Tyr  
 530 535 540

Ser Glu Pro Ala Phe Gly Pro Cys Phe Ser Met Pro Arg Gly Lys Pro  
 545 550 555 560

Pro Ala Pro Ser Pro Arg Gly Gln Lys Ala Ser Pro Pro Thr Leu Ala  
 565 570 575



Pro Ala Thr Ala Ser Pro Pro Thr Thr Ala Gly Ser Asn Asn Pro Cys  
                   580                                  585                                  590

Leu Thr Gln Leu Leu Thr Ala Ala Lys Pro Glu Gln Ala Leu Glu Pro  
                   595                                  600                                  605

Pro Leu Val Ser Ser Thr Leu Leu Arg Ser Pro Gly Ser Pro Gln Glu  
                   610                                  615                                  620

Thr Val Pro Glu Phe Pro Cys Thr Phe Leu Pro Pro Thr Pro Ala Pro  
                   625                                  630                                  635                                  640

Thr Pro Pro Arg Pro Pro Pro Gly Pro Ala Thr Leu Ala Pro Ser Arg  
                                   645                                  650                                  655

Pro Leu Leu Val Pro Lys Ala Glu Arg Leu Ser Pro Pro Ala Pro Ser  
                                   660                                  665                                  670

Gly Lys Glu Arg Gly Cys Arg Asp Trp Gly Asn Leu Gly Asp Glu Gly  
                   675                                  680                                  685

Lys Arg Arg Lys Lys Lys Gly Thr Gly Ser Gly Ala Arg Trp Glu Glu  
                   690                                  695                                  700

Gly Gly Asn Gly Asp Pro Phe Pro Trp Val Gly Leu Ser Val Gly Leu  
                   705                                  710                                  715                                  720

Ser Val Pro Thr Thr Gly Ser Glu Arg Arg Leu Ser Gly Asp Leu Ser  
                                   725                                  730                                  735

Ser Met Pro Gly Pro Gly Thr Leu Ser Val Arg Val Ser Pro Pro Gln  
                                   740                                  745                                  750

Pro Ile Leu Ser Arg Gly Arg Pro Asp Ser Asn Lys Thr Glu Asn Arg  
                   755                                  760                                  765

Arg Ile Thr His Ile Ser Ala Glu Gln Lys Arg Arg Phe Asn Ile Lys  
                   770                                  775                                  780

Leu Gly Phe Asp Thr Leu His Gly Leu Val Ser Thr Leu Ser Ala Gln  
                   785                                  790                                  795                                  800

Pro Ser Leu Lys Val Ser Lys Ala Thr Thr Leu Gln Lys Thr Ala Glu  
                                   805                                  810                                  815

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Tyr Ile Leu Met Leu Gln Gln Glu Arg Ala Gly Leu Gln Glu Glu Ala  
                   820                  825                  830

Gln Gln Leu Arg Asp Glu Ile Glu Glu Leu Asn Ala Ala Ile Asn Leu  
                   835                  840                  845

Cys Gln Gln Gln Leu Pro Ala Thr Gly Val Pro Ile Thr His Gln Arg  
                   850                  855                  860

Phe Asp Gln Met Arg Asp Met Phe Asp Asp Tyr Val Arg Thr Arg Thr  
                   865                  870                  875                  880

Leu His Asn Trp Lys Phe Trp Val Phe Ser Ile Leu Ile Arg Pro Leu  
                   885                  890                  895

Phe Glu Ser Phe Asn Gly Met Val Ser Thr Ala Ser Val His Thr Leu  
                   900                  905                  910

Arg Gln Thr Ser Leu Ala Trp Leu Asp Gln Tyr Cys Ser Leu Pro Ala  
                   915                  920                  925

Leu Arg Pro Thr Val Leu Asn Ser Leu Arg Gln Leu Gly Thr Ser Thr  
                   930                  935                  940

Ser Ile Leu Thr Asp Pro Gly Arg Ile Pro Glu Gln Ala Thr Arg Ala  
                   945                  950                  955                  960

Val Thr Glu Gly Thr Leu Gly Lys Pro Leu  
                   965                  970

<210> 132

<211> 719

<212> PRT

<213> Homo sapien

<400> 132

Ala Val Pro Arg Ala Ala Arg Ser Arg Asp Gln Ala Val Ala Ala Ala  
   1                  5                  10                  15

Thr Ala Met Ala Gly Ala Leu Ala Gly Leu Ala Ala Gly Leu Gln Val  
                   20                  25                  30

Pro Arg Val Ala Pro Ser Pro Asp Ser Asp Ser Asp Thr Asp Ser Glu  
                   35                  40                  45

Asp Pro Ser Leu Arg Arg Ser Ala Gly Gly Leu Leu Arg Ser Gln Val  
                   50                  55                  60

Ile His Ser Gly His Phe Met Val Ser Ser Pro His Ser Asp Ser Leu  
 65 70 75 80

Pro Arg Arg Arg Asp Gln Glu Gly Ser Val Gly Pro Ser Asp Phe Gly  
 85 90 95

Pro Arg Ser Ile Asp Pro Thr Leu Thr Arg Leu Phe Glu Cys Leu Ser  
 100 105 110

Leu Ala Tyr Ser Gly Lys Leu Val Ser Pro Lys Trp Lys Asn Phe Lys  
 115 120 125

Gly Leu Lys Leu Leu Cys Arg Asp Lys Ile Arg Leu Asn Asn Ala Ile  
 130 135 140

Trp Arg Ala Trp Tyr Ile Gln Tyr Val Lys Arg Arg Lys Ser Pro Val  
 145 150 155 160

Cys Gly Phe Val Thr Pro Leu Gln Gly Pro Glu Ala Asp Ala His Arg  
 165 170 175

Lys Pro Glu Ala Val Val Leu Glu Gly Asn Tyr Trp Lys Arg Arg Ile  
 180 185 190

Glu Val Val Met Arg Glu Tyr His Lys Trp Arg Ile Tyr Tyr Lys Lys  
 195 200 205

Arg Val Ser Gly Gly Gly Pro Gly Arg Pro Gln Ser Phe Pro Pro Ala  
 210 215 220

Ala Ala Gly Tyr Arg Pro Pro Arg Lys Ile Pro Gly Lys Gly Ile Leu  
 225 230 235 240

Thr Pro Glu Leu Ala Pro Leu Gly Pro Ser Ile Gln Ser Arg Ala Asp  
 245 250 255

Ser Ala Thr Val Trp Pro Gln Arg Leu Leu Ala Ala Ser Leu Pro Arg  
 260 265 270

Gly Arg Leu Arg Lys Pro Ser Arg Glu Asp Asp Leu Leu Ala Pro Lys  
 275 280 285

Gln Ala Glu Gly Arg Trp Pro Pro Pro Glu Gln Trp Cys Lys Gln Leu  
 290 295 300

Phe Ser Ser Val Val Pro Val Leu Leu Gly Asp Pro Glu Glu Glu Pro  
 305 310 315 320

Gly Gly Arg Gln Leu Leu Asp Leu Asn Cys Phe Leu Ser Asp Ile Ser  
 325 330 335

Asp Thr Leu Phe Thr Met Thr Gln Ser Gly Pro Ser Pro Leu Gln Leu  
 340 345 350

Pro Pro Glu Asp Ala Tyr Val Gly Asn Ala Asp Met Ile Gln Pro Asp  
 355 360 365

Leu Thr Pro Leu Gln Pro Ser Leu Asp Asp Phe Met Asp Ile Ser Asp  
 370 375 380

Phe Phe Thr Asn Ser Arg Leu Pro Gln Pro Pro Met Pro Ser Asn Phe  
 385 390 395 400

Pro Glu Pro Pro Ser Phe Ser Pro Val Val Asp Ser Leu Phe Ser Ser  
 405 410 415

Gly Thr Leu Gly Pro Glu Val Pro Pro Ala Ser Ser Ala Met Thr His  
 420 425 430

Leu Ser Gly His Ser Arg Leu Gln Ala Arg Asn Ser Cys Pro Gly Pro  
 435 440 445

Leu Asp Ser Ser Ala Phe Leu Ser Ser Asp Phe Leu Leu Pro Glu Asp  
 450 455 460

Pro Lys Pro Arg Leu Pro Pro Pro Pro Val Pro Pro Pro Leu Leu His  
 465 470 475 480

Tyr Pro Pro Pro Ala Lys Val Pro Gly Leu Glu Pro Cys Pro Pro Pro  
 485 490 495

Pro Phe Pro Pro Met Ala Pro Pro Thr Ala Leu Leu Gln Glu Glu Pro  
 500 505 510

Leu Phe Ser Pro Arg Phe Pro Phe Pro Thr Val Pro Pro Ala Pro Gly  
 515 520 525

Val Ser Pro Leu Pro Ala Pro Ala Ala Phe Pro Pro Thr Pro Gln Ser  
 530 535 540

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Val Pro Ser Pro Ala Pro Thr Pro Phe Pro Ile Glu Leu Leu Pro Leu  
545 550 555 560

Gly Tyr Ser Glu Pro Ala Phe Gly Pro Cys Phe Ser Met Pro Arg Gly  
565 570 575

Lys Pro Pro Ala Pro Ser Pro Arg Gly Gln Lys Ala Ser Pro Pro Thr  
580 585 590

Leu Ala Pro Ala Thr Ala Ser Pro Pro Thr Thr Ala Gly Ser Asn Asn  
595 600 605

Pro Cys Leu Thr Gln Leu Leu Thr Ala Ala Lys Pro Glu Gln Ala Leu  
610 615 620

Glu Pro Pro Leu Val Ser Ser Thr Leu Leu Arg Ser Pro Gly Ser Pro  
625 630 635 640

Gln Glu Thr Val Pro Glu Phe Pro Cys Thr Phe Leu Pro Pro Thr Pro  
645 650 655

Ala Pro Thr Pro Pro Arg Pro Pro Pro Gly Pro Ala Thr Leu Ala Pro  
660 665 670

Ser Arg Pro Leu Leu Val Pro Lys Ala Glu Arg Leu Ser Pro Pro Ala  
675 680 685

Pro Ser Gly Lys Glu Arg Gly Cys Arg Asp Trp Gly Asn Leu Gly Asp  
690 695 700

Glu Gly Lys Arg Arg Lys Lys Lys Gly Thr Gly Ser Gly Ala Arg  
705 710 715

<210> 133  
<211> 629  
<212> PRT  
<213> Homo sapien

<400> 133

Met Ala Val Pro Trp Glu Gln Ala Ser Leu Gly Gly Gln Arg Pro Cys  
1 5 10 15

Leu Gly Thr Gln Arg Pro Ala Thr Asp Phe Phe Thr Asn Ser Arg Leu  
20 25 30

Pro Gln Pro Pro Met Pro Ser Asn Phe Pro Glu Pro Pro Ser Phe Ser  
35 40 45

Pro Val Val Asp Ser Leu Phe Ser Ser Gly Thr Leu Gly Pro Glu Val  
 50 55 60

Pro Pro Ala Ser Ser Ala Met Thr His Leu Ser Gly His Ser Arg Leu  
 65 70 75 80

Gln Ala Arg Asn Ser Cys Pro Gly Pro Leu Asp Ser Ser Ala Phe Leu  
 85 90 95

Ser Ser Asp Phe Leu Leu Pro Glu Asp Pro Lys Pro Arg Leu Pro Pro  
 100 105 110

Pro Pro Val Pro Pro Pro Leu Leu His Tyr Pro Pro Pro Ala Lys Val  
 115 120 125

Pro Gly Leu Glu Pro Cys Pro Pro Pro Pro Phe Pro Pro Met Ala Pro  
 130 135 140

Pro Thr Ala Leu Leu Gln Glu Glu Pro Leu Phe Ser Pro Arg Phe Pro  
 145 150 155 160

Phe Pro Thr Val Pro Pro Ala Pro Gly Val Ser Pro Leu Pro Ala Pro  
 165 170 175

Ala Ala Phe Pro Pro Thr Pro Gln Ser Val Pro Ser Pro Ala Pro Thr  
 180 185 190

Pro Phe Pro Ile Glu Leu Leu Pro Leu Gly Tyr Ser Glu Pro Ala Phe  
 195 200 205

Gly Pro Cys Phe Ser Met Pro Arg Gly Lys Pro Pro Ala Pro Ser Pro  
 210 215 220

Arg Gly Gln Lys Ala Ser Pro Pro Thr Leu Ala Pro Ala Thr Ala Ser  
 225 230 235 240

Pro Pro Thr Thr Ala Gly Ser Asn Asn Pro Cys Leu Thr Gln Leu Leu  
 245 250 255

Thr Ala Ala Lys Pro Glu Gln Ala Leu Glu Pro Pro Leu Val Ser Ser  
 260 265 270

Thr Leu Leu Arg Ser Pro Gly Ser Pro Gln Glu Thr Val Pro Glu Phe  
 275 280 285

Pro Cys Thr Phe Leu Pro Pro Thr Pro Ala Pro Thr Pro Pro Arg Pro  
 290 295 300

Pro Pro Gly Pro Ala Thr Leu Ala Pro Ser Arg Pro Leu Leu Val Pro  
 305 310 315 320

Lys Ala Glu Arg Leu Ser Pro Pro Ala Pro Ser Gly Lys Glu Arg Gly  
 325 330 335

Cys Arg Asp Trp Gly Asn Leu Gly Asp Glu Gly Lys Arg Arg Lys Lys  
 340 345 350

Lys Gly Thr Gly Ser Gly Ala Arg Gly Glu Glu Gly Gly Asn Gly Asp  
 355 360 365

Pro Phe Pro Trp Val Gly Leu Ser Val Gly Leu Ser Val Pro Thr Thr  
 370 375 380

Gly Ser Glu Arg Arg Leu Ser Gly Asp Leu Ser Ser Met Pro Gly Pro  
 385 390 395 400

Gly Thr Leu Ser Val Arg Val Ser Pro Pro Gln Pro Ile Leu Ser Arg  
 405 410 415

Gly Arg Pro Asp Ser Asn Lys Thr Glu Asn Arg Arg Ile Thr His Ile  
 420 425 430

Ser Ala Glu Gln Lys Arg Arg Phe Asn Ile Lys Leu Gly Phe Asp Thr  
 435 440 445

Leu His Gly Leu Val Ser Thr Leu Ser Ala Gln Pro Ser Leu Lys Val  
 450 455 460

Ser Lys Ala Thr Thr Leu Gln Lys Thr Ala Glu Tyr Ile Leu Met Leu  
 465 470 475 480

Gln Gln Glu Arg Ala Gly Leu Gln Glu Glu Ala Gln Gln Leu Arg Asp  
 485 490 495

Glu Ile Glu Glu Leu Asn Ala Ala Ile Asn Leu Cys Gln Gln Gln Leu  
 500 505 510

Pro Ala Thr Gly Val Pro Ile Thr His Gln Arg Phe Asp Gln Met Arg  
 515 520 525

Asp Met Phe Asp Asp Tyr Val Arg Thr Arg Thr Leu His Asn Trp Lys  
 530 535 540

Phe Trp Val Phe Ser Ile Leu Ile Arg Pro Leu Phe Glu Ser Phe Asn  
 545 550 555 560

Gly Met Val Ser Thr Ala Ser Val His Thr Leu Arg Gln Thr Ser Leu  
 565 570 575

Ala Trp Leu Asp Gln Tyr Cys Ser Leu Pro Ala Leu Arg Pro Thr Val  
 580 585 590

Leu Asn Ser Leu Arg Gln Leu Gly Thr Ser Thr Ser Ile Leu Thr Asp  
 595 600 605

Pro Gly Arg Ile Pro Glu Gln Ala Thr Arg Ala Val Thr Glu Gly Thr  
 610 615 620

Leu Gly Lys Pro Leu  
 625

<210> 134  
 <211> 382  
 <212> PRT  
 <213> Homo sapien

<400> 134

Gly Thr Thr Pro Thr Pro Val Pro Val Pro Gly Gly Gly Gly Gly Cys  
 1 5 10 15

Pro Gly Ala Glu Val Cys Met Ala Val Pro Trp Glu Gln Ala Ser Leu  
 20 25 30

Gly Gly Gln Arg Pro Cys Leu Gly Thr Gln Arg Pro Ala Thr Asp Phe  
 35 40 45

Phe Thr Asn Ser Arg Leu Pro Gln Pro Pro Met Pro Ser Asn Phe Pro  
 50 55 60

Glu Pro Pro Ser Phe Ser Pro Val Val Asp Ser Leu Phe Ser Ser Gly  
 65 70 75 80

Thr Leu Gly Pro Glu Val Pro Pro Ala Ser Ser Ala Met Thr His Leu  
 85 90 95

Ser Gly His Ser Arg Leu Gln Ala Arg Asn Ser Cys Pro Gly Pro Leu  
 100 105 110



Asp Ser Ser Ala Phe Leu Ser Ser Asp Phe Leu Leu Pro Glu Asp Pro  
 115 120 125

Lys Pro Arg Leu Pro Pro Pro Pro Val Pro Pro Pro Leu Leu His Tyr  
 130 135 140

Pro Pro Pro Ala Lys Val Pro Gly Leu Glu Pro Cys Pro Pro Pro Pro  
 145 150 155 160

Phe Pro Pro Met Ala Pro Pro Thr Ala Leu Leu Gln Glu Glu Pro Leu  
 165 170 175

Phe Ser Pro Arg Phe Pro Phe Pro Thr Val Pro Pro Ala Pro Gly Val  
 180 185 190

Ser Pro Leu Pro Ala Pro Ala Ala Phe Pro Pro Thr Pro Gln Ser Val  
 195 200 205

Pro Ser Pro Ala Pro Thr Pro Phe Pro Ile Glu Leu Leu Pro Leu Gly  
 210 215 220

Tyr Ser Glu Pro Ala Phe Gly Pro Cys Phe Ser Met Pro Arg Gly Lys  
 225 230 235 240

Pro Pro Ala Pro Ser Pro Arg Gly Gln Lys Ala Ser Pro Pro Thr Leu  
 245 250 255

Ala Pro Ala Thr Ala Ser Pro Pro Thr Thr Ala Gly Ser Asn Asn Pro  
 260 265 270

Cys Leu Thr Gln Leu Leu Thr Ala Ala Lys Pro Glu Gln Ala Leu Glu  
 275 280 285

Pro Pro Leu Val Ser Ser Thr Leu Leu Arg Ser Pro Gly Ser Pro Gln  
 290 295 300

Glu Thr Val Pro Glu Phe Pro Cys Thr Phe Leu Pro Pro Thr Pro Ala  
 305 310 315 320

Pro Thr Pro Pro Arg Pro Pro Pro Gly Pro Ala Thr Leu Ala Pro Ser  
 325 330 335

Arg Pro Leu Leu Val Pro Lys Ala Glu Arg Leu Ser Pro Pro Ala Pro  
 340 345 350

Ser Gly Lys Glu Arg Gly Cys Arg Asp Trp Gly Asn Leu Gly Asp Glu  
 355 360 365

Gly Lys Arg Arg Lys Lys Lys Gly Thr Gly Ser Gly Ala Arg  
 370 375 380

<210> 135  
 <211> 1009  
 <212> PRT  
 <213> Homo sapien

<400> 135

Met Ala Gly Ala Leu Ala Gly Leu Ala Ala Gly Leu Gln Val Pro Arg  
 1 5 10 15

Val Ala Pro Ser Pro Asp Ser Asp Ser Asp Thr Asp Ser Glu Asp Pro  
 20 25 30

Ser Leu Arg Arg Ser Ala Gly Gly Leu Leu Arg Ser Gln Val Ile His  
 35 40 45

Ser Gly His Phe Met Val Ser Ser Pro His Ser Asp Ser Leu Pro Arg  
 50 55 60

Arg Arg Asp Gln Glu Gly Ser Val Gly Pro Ser Asp Phe Gly Pro Arg  
 65 70 75 80

Ser Ile Asp Pro Thr Leu Thr Arg Leu Phe Glu Cys Leu Ser Leu Ala  
 85 90 95

Tyr Ser Gly Lys Leu Val Ser Pro Lys Trp Lys Asn Phe Lys Gly Leu  
 100 105 110

Lys Leu Leu Cys Arg Asp Lys Ile Arg Leu Asn Asn Ala Ile Trp Arg  
 115 120 125

Ala Trp Tyr Ile Gln Tyr Val Lys Arg Arg Lys Ser Pro Val Cys Gly  
 130 135 140

Phe Val Thr Pro Leu Gln Gly Pro Glu Ala Asp Ala His Arg Lys Pro  
 145 150 155 160

Glu Ala Val Val Leu Glu Gly Asn Tyr Trp Lys Arg Arg Ile Glu Val  
 165 170 175

Val Met Arg Glu Tyr His Lys Trp Arg Ile Tyr Tyr Lys Lys Arg Val

180	185	190
Ser Gly Gly Gly Pro Gly Arg	Pro Gln Ser Phe Pro	Pro Ala Ala Ala
195	200	205
Gly Tyr Arg Pro Pro Arg Lys	Ile Pro Gly Lys Gly	Ile Leu Thr Pro
210	215	220
Glu Leu Ala Pro Leu Gly Pro	Ser Ile Gln Ser Arg Ala	Asp Ser Ala
225	230	235
Thr Val Trp Pro Gln Arg Leu	Leu Ala Ala Ser Leu Pro	Arg Gly Arg
245	250	255
Val Ser Ser Cys Gly Lys Trp	Gly Ile Ser Ser Leu Val	Ser Arg Gly
260	265	270
Asp Phe Gly Gly Lys Val Met	Glu Asp Gly Ala Lys Gly	Ser Gly Val
275	280	285
Gln Leu Cys Val Ser Leu Gln	Leu Arg Lys Pro Ser Arg	Glu Asp Asp
290	295	300
Leu Leu Ala Pro Lys Gln Ala	Glu Gly Arg Trp Pro Pro	Pro Glu Gln
305	310	315
Trp Cys Lys Gln Leu Phe Ser	Ser Val Val Pro Val Leu	Leu Gly Asp
325	330	335
Pro Glu Glu Glu Pro Gly Gly	Arg Gln Leu Leu Asp Leu	Asn Cys Phe
340	345	350
Leu Ser Asp Ile Ser Asp Thr	Leu Phe Thr Met Thr Gln	Ser Gly Pro
355	360	365
Ser Pro Leu Gln Leu Pro Pro	Glu Asp Ala Tyr Val Gly	Asn Ala Asp
370	375	380
Met Ile Gln Pro Asp Leu Thr	Pro Leu Gln Pro Ser Leu	Asp Asp Phe
385	390	395
Met Asp Ile Ser Asp Phe Phe	Thr Asn Ser Arg Leu Pro	Gln Pro Pro
405	410	415
Met Pro Ser Asn Phe Pro Glu	Pro Pro Ser Phe Ser Pro	Val Val Asp
420	425	430

Ser Leu Phe Ser Ser Gly Thr Leu Gly Pro Glu Val Pro Pro Ala Ser  
 435 440 445

Ser Ala Met Thr His Leu Ser Gly His Ser Arg Leu Gln Ala Arg Asn  
 450 455 460

Ser Cys Pro Gly Pro Leu Asp Ser Ser Ala Phe Leu Ser Ser Asp Phe  
 465 470 475 480

Leu Leu Pro Glu Asp Pro Lys Pro Arg Leu Pro Pro Pro Pro Val Pro  
 485 490 495

Pro Pro Leu Leu His Tyr Pro Pro Pro Ala Lys Val Pro Gly Leu Glu  
 500 505 510

Pro Cys Pro Pro Pro Pro Phe Pro Pro Met Ala Pro Pro Thr Ala Leu  
 515 520 525

Leu Gln Glu Glu Pro Leu Phe Ser Pro Arg Phe Pro Phe Pro Thr Val  
 530 535 540

Pro Pro Ala Pro Gly Val Ser Pro Leu Pro Ala Pro Ala Ala Phe Pro  
 545 550 555 560

Pro Thr Pro Gln Ser Val Pro Ser Pro Ala Pro Thr Pro Phe Pro Ile  
 565 570 575

Glu Leu Leu Pro Leu Gly Tyr Ser Glu Pro Ala Phe Gly Pro Cys Phe  
 580 585 590

Ser Met Pro Arg Gly Lys Pro Pro Ala Pro Ser Pro Arg Gly Gln Lys  
 595 600 605

Ala Ser Pro Pro Thr Leu Ala Pro Ala Thr Ala Ser Pro Pro Thr Thr  
 610 615 620

Ala Gly Ser Asn Asn Pro Cys Leu Thr Gln Leu Leu Thr Ala Ala Lys  
 625 630 635 640

Pro Glu Gln Ala Leu Glu Pro Pro Leu Val Ser Ser Thr Leu Leu Arg  
 645 650 655

Ser Pro Gly Ser Pro Gln Glu Thr Val Pro Glu Phe Pro Cys Thr Phe  
 660 665 670

Leu Pro Pro Thr Pro Ala Pro Thr Pro Pro Arg Pro Pro Pro Gly Pro  
 675 680 685

Ala Thr Leu Ala Pro Ser Arg Pro Leu Leu Val Pro Lys Ala Glu Arg  
 690 695 700

Leu Ser Pro Pro Ala Pro Ser Gly Lys Glu Arg Gly Cys Arg Asp Trp  
 705 710 715 720

Gly Asn Leu Gly Asp Glu Gly Lys Arg Arg Lys Lys Lys Gly Thr Gly  
 725 730 735

Ser Gly Ala Arg Trp Glu Glu Gly Gly Asn Gly Asp Pro Phe Pro Trp  
 740 745 750

Val Gly Leu Ser Val Gly Leu Ser Val Pro Thr Thr Gly Ser Glu Arg  
 755 760 765

Arg Leu Ser Gly Asp Leu Ser Ser Met Pro Gly Pro Gly Thr Leu Ser  
 770 775 780

Val Arg Val Ser Pro Pro Gln Pro Ile Leu Ser Arg Gly Arg Pro Asp  
 785 790 795 800

Ser Asn Lys Thr Glu Asn Arg Arg Ile Thr His Ile Ser Ala Glu Gln  
 805 810 815

Lys Arg Arg Phe Asn Ile Lys Leu Gly Phe Asp Thr Leu His Gly Leu  
 820 825 830

Val Ser Thr Leu Ser Ala Gln Pro Ser Leu Lys Val Ser Lys Ala Thr  
 835 840 845

Thr Leu Gln Lys Thr Ala Glu Tyr Ile Leu Met Leu Gln Gln Glu Arg  
 850 855 860

Ala Gly Leu Gln Glu Glu Ala Gln Gln Leu Arg Asp Glu Ile Glu Glu  
 865 870 875 880

Leu Asn Ala Ala Ile Asn Leu Cys Gln Gln Gln Leu Pro Ala Thr Gly  
 885 890 895

Val Pro Ile Thr His Gln Arg Phe Asp Gln Met Arg Asp Met Phe Asp  
 900 905 910

Asp Tyr Val Arg Thr Arg Thr Leu His Asn Trp Lys Phe Trp Val Phe  
 915 920 925

Ser Ile Leu Ile Arg Pro Leu Phe Glu Ser Phe Asn Gly Met Val Ser  
 930 935 940

Thr Ala Ser Val His Thr Leu Arg Gln Thr Ser Leu Ala Trp Leu Asp  
 945 950 955 960

Gln Tyr Cys Ser Leu Pro Ala Leu Arg Pro Thr Val Leu Asn Ser Leu  
 965 970 975

Arg Gln Leu Gly Thr Ser Thr Ser Ile Leu Thr Asp Pro Gly Arg Ile  
 980 985 990

Pro Glu Gln Ala Thr Arg Ala Val Thr Glu Gly Thr Leu Gly Lys Pro  
 995 1000 1005

Leu

<210> 136  
 <211> 469  
 <212> PRT  
 <213> Homo sapien

<400> 136

Arg Arg Leu Trp Gly Glu Ser Asp Gly Gly Trp Gly Lys Gly Ser Gly  
 1 5 10 15

Val Gln Leu Cys Val Ser Leu Gln Leu Arg Lys Pro Ser Arg Glu Asp  
 20 25 30

Asp Leu Leu Ala Pro Lys Gln Ala Glu Gly Arg Trp Pro Pro Pro Glu  
 35 40 45

Gln Trp Cys Lys Gln Leu Phe Ser Ser Val Val Pro Val Leu Leu Gly  
 50 55 60

Asp Pro Glu Glu Glu Pro Gly Gly Arg Gln Leu Leu Asp Leu Asn Cys  
 65 70 75 80

Phe Leu Ser Asp Ile Ser Asp Thr Leu Phe Thr Met Thr Gln Ser Gly  
 85 90 95

Pro Ser Pro Leu Gln Leu Pro Pro Glu Asp Ala Tyr Val Gly Asn Ala  
 100 105 110

Asp Met Ile Gln Pro Asp Leu Thr Pro Leu Gln Pro Ser Leu Asp Asp  
 115 120 125

Phe Met Asp Ile Ser Asp Phe Phe Thr Asn Ser Arg Leu Pro Gln Pro  
 130 135 140

Pro Met Pro Ser Asn Phe Pro Glu Pro Pro Ser Phe Ser Pro Val Val  
 145 150 155 160

Asp Ser Leu Phe Ser Ser Gly Thr Leu Gly Pro Glu Val Pro Pro Ala  
 165 170 175

Ser Ser Ala Met Thr His Leu Ser Gly His Ser Arg Leu Gln Ala Arg  
 180 185 190

Asn Ser Cys Pro Gly Pro Leu Asp Ser Ser Ala Phe Leu Ser Ser Asp  
 195 200 205

Phe Leu Leu Pro Glu Asp Pro Lys Pro Arg Leu Pro Pro Pro Pro Val  
 210 215 220

Pro Pro Pro Leu Leu His Tyr Pro Pro Pro Ala Lys Val Pro Gly Leu  
 225 230 235 240

Glu Pro Cys Pro Pro Pro Pro Phe Pro Pro Met Ala Pro Pro Thr Ala  
 245 250 255

Leu Leu Gln Glu Glu Pro Leu Phe Ser Pro Arg Phe Pro Phe Pro Thr  
 260 265 270

Val Pro Pro Ala Pro Gly Val Ser Pro Leu Pro Ala Pro Ala Ala Phe  
 275 280 285

Pro Pro Thr Pro Gln Ser Val Pro Ser Pro Ala Pro Thr Pro Phe Pro  
 290 295 300

Ile Glu Leu Leu Pro Leu Gly Tyr Ser Glu Pro Ala Phe Gly Pro Cys  
 305 310 315 320

Phe Ser Met Pro Arg Gly Lys Pro Pro Ala Pro Ser Pro Arg Gly Gln  
 325 330 335

Lys Ala Ser Pro Pro Thr Leu Ala Pro Ala Thr Ala Ser Pro Pro Thr  
 340 345 350

Thr Ala Gly Ser Asn Asn Pro Cys Leu Thr Gln Leu Leu Thr Ala Ala  
 355 360 365

Lys Pro Glu Gln Ala Leu Glu Pro Pro Leu Val Ser Ser Thr Leu Leu  
 370 375 380

Arg Ser Pro Gly Ser Pro Gln Glu Thr Val Pro Glu Phe Pro Cys Thr  
 385 390 395 400

Phe Leu Pro Pro Thr Pro Ala Pro Thr Pro Pro Arg Pro Pro Pro Gly  
 405 410 415

Pro Ala Thr Leu Ala Pro Ser Arg Pro Leu Leu Val Pro Lys Ala Glu  
 420 425 430

Arg Leu Ser Pro Pro Ala Pro Ser Gly Lys Glu Arg Gly Cys Arg Asp  
 435 440 445

Trp Gly Asn Leu Gly Asp Glu Gly Lys Arg Arg Lys Lys Lys Gly Thr  
 450 455 460

Gly Ser Gly Ala Arg  
 465

<210> 137  
 <211> 191  
 <212> PRT  
 <213> Homo sapien

<400> 137

Val Leu Pro Cys Pro Gly Pro Gly Pro Leu Val Thr Ser Cys Phe Pro  
 1 5 10 15

Pro Thr Val Ser Pro Tyr Pro His Pro Gly Pro Gly Trp Ser Pro Ala  
 20 25 30

His Arg Gly Ala Thr Gly Gly Asn Gly Pro Asp Ser Gly Ala Thr Asp  
 35 40 45

Ser Pro Ala Val Gly Asp Asp Asp Arg Glu Gln Val Ala Gly Pro Lys  
 50 55 60

Gly Lys Ala Pro Pro Val Pro Ala Pro Ala Arg Glu Ser Gly Asn Arg  
 65 70 75 80

Ser Ala Arg Pro Leu His Ser Leu Ser Val Leu Ala Phe Asp Gln Glu



	85		90		95
Arg Leu Glu Arg Lys Ile Leu Ala Leu Arg Gln Ala Arg Arg Pro Val	100		105		110
Pro Pro Glu Val Ala Gln Gln Tyr Gln Asp Ile Met Gln Arg Ser Gln	115		120		125
Trp Gln Arg Ala Gln Leu Glu Gln Gly Gly Val Gly Ile Arg Arg Glu	130		135		140
Tyr Ala Ala Gln Leu Glu Arg Gln Leu Gln Phe Tyr Thr Glu Ala Ala	145		150		155
Arg Arg Leu Gly Asn Asp Gly Ser Arg Asp Ala Ala Lys Glu Ala Leu	165		170		175
Tyr Arg Arg Asn Leu Val Glu Ser Glu Leu Gln Arg Leu Arg Arg	180		185		190
<210> 138					
<211> 117					
<212> PRT					
<213> Homo sapien					
<400> 138					
Glu Gly Leu Gly Asp Gly His Leu Glu Gly Glu Gly Leu Gly Asp Gly	1		5		10
His Leu Glu Gly Glu Gly Leu Gly Asp Gly His Leu Glu Gly Glu Gly	20		25		30
Leu Gly Asp Gly His Leu Ala Gly Asp Gly Leu Gly Asp Gly His Ser	35		40		45
Pro Gly Gly Leu Trp Ala Val Arg Pro His Pro Lys Pro Pro Phe Pro	50		55		60
Arg His Pro Phe Ser Glu Tyr Ala Ala Gln Leu Glu Arg Gln Leu Gln	65		70		75
Phe Tyr Thr Glu Ala Ala Arg Arg Leu Gly Asn Asp Gly Ser Arg Asp	85		90		95
Ala Ala Lys Glu Ala Leu Tyr Arg Arg Asn Leu Val Glu Ser Glu Leu	100		105		110

Gln Arg Leu Arg Arg  
115

<210> 139  
<211> 165  
<212> PRT  
<213> Homo sapien

<400> 139

Arg Val Ser Cys Ser Gly Ser Ala Gly Glu Glu Pro Met Gly Arg Ala  
1 5 10 15

Ala Pro Arg Lys Arg Ala Ala Gly Pro Asp Thr Gly Lys Ser Arg His  
20 25 30

Ser His Glu Pro Asp Lys Gln Thr Ile Ser Gly Gln Ser Val Leu Asp  
35 40 45

Ser Pro Leu Ile Arg Ala Pro Ser Pro Ala Arg Ala Ser Val Ala Ala  
50 55 60

Gly Val Gly Asn His Ala Cys Gln Pro Val Cys Ala Pro His Pro Gly  
65 70 75 80

Leu Ala Gly Pro Trp Arg Val Leu Phe Ala Gln Pro Arg Gly Val Arg  
85 90 95

Pro Leu Ala Arg Pro Gly Ala Gly Arg Val Ala Gly Ala Lys Pro Arg  
100 105 110

Gly Pro Leu Gln Ala Leu Tyr Phe Leu Phe Leu Pro Ser Leu Asn Pro  
115 120 125

Lys Ala Leu Leu His Pro Lys Glu Ala Thr Glu Ala Gly Arg Ala Thr  
130 135 140

Leu Ser Pro Gln Gly Arg Arg Pro Gly Pro Ala Gly Ser Pro Gly Pro  
145 150 155 160

Ala His Gly Ile Lys  
165

<210> 140  
<211> 146  
<212> PRT  
<213> Homo sapien

&lt;400&gt; 140

Glu Gly Leu Gly Asp Gly His Leu Glu Gly Glu Gly Leu Gly Asp Gly  
 1 5 10 15

His Leu Glu Gly Glu Gly Leu Gly Asp Gly His Leu Glu Gly Glu Gly  
 20 25 30

Leu Gly Asp Gly His Leu Ala Gly Asp Gly Leu Gly Asp Gly His Ser  
 35 40 45

Pro Gly Gly Leu Trp Ala Val Arg Pro His Pro Lys Pro Pro Phe Pro  
 50 55 60

Arg His Pro Phe Ser Glu Tyr Ala Ala Gln Leu Glu Arg Gln Leu Gln  
 65 70 75 80

Phe Tyr Thr Glu Ala Ala Arg Arg Leu Gly Asn Asp Gly Ser Arg Val  
 85 90 95

Ser Trp Ser Arg Ala Gly Trp Ala Leu Gly Ser Gly Gln Gly Gly Ala  
 100 105 110

Cys Arg Asp Tyr Leu Leu Asn Ala His Pro Pro Gln Asp Ala Ala Lys  
 115 120 125

Glu Ala Leu Tyr Arg Arg Asn Leu Val Glu Ser Glu Leu Gln Arg Leu  
 130 135 140

Arg Arg  
 145

&lt;210&gt; 141

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 141

Arg Val Ser Cys Ser Gly Ser Ala Gly Glu Glu Pro Met Gly Arg Ala  
 1 5 10 15

Ala Pro Arg Lys Arg Ala Ala Gly Pro Asp Thr Gly Lys Ser Arg His  
 20 25 30

Ser His Glu Pro Asp Lys Gln Thr Ile Ser Gly Gln Ser Val Leu Asp  
 35 40 45

Ser Pro Leu Ile Arg Ala Pro Ser Pro Ala Arg Ala Ser Val Ala Ala  
50 55 60

Gly Val Gly Asn His Ala Cys Gln Pro Val Cys Ala Pro His Pro Gly  
65 70 75 80

Leu Ala Gly Pro Trp Arg Val Leu Phe Ala Gln Pro Arg Gly Val Arg  
85 90 95

Pro Leu Ala Arg Pro Gly Ala Gly Arg Val Ala Gly Ala Lys Pro Arg  
100 105 110

Gly Pro Leu Gln Ala Leu Tyr Phe Leu Phe Leu Pro Ser Leu Asn Pro  
115 120 125

Lys Ala Leu Leu His Pro Lys Glu Ala Thr Glu Ala Gly Arg Ala Thr  
130 135 140

Leu Ser Pro Gln Gly Arg Arg Pro Gly Pro Ala Gly Ser Pro Gly Pro  
145 150 155 160

Ala His Gly Ile Lys  
165

<210> 142  
<211> 636  
<212> PRT  
<213> Homo sapien

<400> 142

Met Thr Ser Ser Gly Pro Gly Pro Arg Phe Leu Leu Leu Leu Pro Leu  
1 5 10 15

Leu Leu Pro Pro Ala Ala Ser Ala Ser Asp Arg Pro Arg Gly Arg Asp  
20 25 30

Pro Val Asn Pro Glu Lys Leu Leu Val Ile Thr Val Ala Thr Ala Glu  
35 40 45

Thr Glu Gly Tyr Leu Arg Phe Leu Arg Ser Ala Glu Phe Phe Asn Tyr  
50 55 60

Thr Val Arg Thr Leu Gly Leu Gly Glu Glu Trp Arg Gly Gly Asp Val  
65 70 75 80

Ala Arg Thr Val Gly Gly Gly Gln Lys Val Arg Trp Leu Lys Lys Glu  
85 90 95

Met Glu Lys Tyr Ala Asp Arg Glu Asp Met Ile Ile Met Phe Val Asp  
 100 105 110

Ser Tyr Asp Val Ile Leu Ala Gly Ser Pro Thr Glu Leu Leu Lys Lys  
 115 120 125

Phe Val Gln Ser Gly Ser Arg Leu Leu Phe Ser Ala Glu Ser Phe Cys  
 130 135 140

Trp Pro Glu Trp Gly Leu Ala Glu Gln Tyr Pro Glu Val Gly Thr Gly  
 145 150 155 160

Lys Arg Phe Leu Asn Ser Gly Gly Phe Ile Gly Phe Ala Thr Thr Ile  
 165 170 175

His Gln Ile Val Arg Gln Trp Lys Tyr Lys Asp Asp Asp Asp Asp Gln  
 180 185 190

Leu Phe Tyr Thr Arg Leu Tyr Leu Asp Pro Gly Leu Arg Glu Lys Leu  
 195 200 205

Ser Leu Asn Leu Asp His Lys Ser Arg Ile Phe Gln Asn Leu Asn Gly  
 210 215 220

Ala Leu Asp Glu Val Val Leu Lys Phe Asp Arg Asn Arg Val Arg Ile  
 225 230 235 240

Arg Asn Val Ala Tyr Asp Thr Leu Pro Ile Val Val His Gly Asn Gly  
 245 250 255

Pro Thr Lys Leu Gln Leu Asn Tyr Leu Gly Asn Tyr Val Pro Asn Gly  
 260 265 270

Trp Thr Pro Glu Gly Gly Cys Gly Phe Cys Asn Gln Asp Arg Arg Thr  
 275 280 285

Leu Pro Gly Gly Gln Pro Pro Pro Arg Val Phe Leu Ala Val Phe Val  
 290 295 300

Glu Gln Pro Thr Pro Phe Leu Pro Arg Phe Leu Gln Arg Leu Leu Leu  
 305 310 315 320

Leu Asp Tyr Pro Pro Asp Arg Val Thr Leu Phe Leu His Asn Asn Glu  
 325 330 335

Val Phe His Glu Pro His Ile Ala Asp Ser Trp Pro Gln Leu Gln Asp  
 340 345 350

His Phe Ser Ala Val Lys Leu Val Gly Pro Glu Glu Ala Leu Ser Pro  
 355 360 365

Gly Glu Ala Arg Asp Met Ala Met Asp Leu Cys Arg Gln Asp Pro Glu  
 370 375 380

Cys Glu Phe Tyr Phe Ser Leu Asp Ala Asp Ala Val Leu Thr Asn Leu  
 385 390 395 400

Gln Thr Leu Arg Ile Leu Ile Glu Glu Asn Arg Lys Val Ile Ala Pro  
 405 410 415

Met Leu Ser Arg His Gly Lys Leu Trp Ser Asn Phe Trp Gly Ala Leu  
 420 425 430

Ser Pro Asp Glu Tyr Tyr Ala Arg Ser Glu Asp Tyr Val Glu Leu Val  
 435 440 445

Gln Arg Lys Arg Val Gly Val Trp Asn Val Pro Tyr Ile Ser Gln Ala  
 450 455 460

Tyr Val Ile Arg Gly Asp Thr Leu Arg Met Glu Leu Pro Gln Arg Asp  
 465 470 475 480

Val Phe Ser Gly Ser Asp Thr Asp Pro Asp Met Ala Phe Cys Lys Ser  
 485 490 495

Phe Arg Asp Lys Gly Ile Phe Leu His Leu Ser Asn Gln His Glu Phe  
 500 505 510

Gly Arg Leu Leu Ala Thr Ser Arg Tyr Asp Thr Glu His Leu His Pro  
 515 520 525

Asp Leu Trp Gln Ile Phe Asp Asn Pro Val Asp Trp Lys Glu Gln Tyr  
 530 535 540

Ile His Glu Asn Tyr Ser Arg Ala Leu Glu Gly Glu Gly Ile Val Glu  
 545 550 555 560

Gln Pro Cys Pro Asp Val Tyr Trp Phe Pro Leu Leu Ser Glu Gln Met  
 565 570 575

Cys Asp Glu Leu Val Ala Glu Met Glu His Tyr Gly Gln Trp Ser Gly  
                   580                  585                  590

Gly Arg His Glu Thr Ala Leu Gln Glu Cys Leu Met Pro Val Glu Leu  
                   595                  600                  605

Cys Pro Ala Val Ser Ser Ser His His Thr Ala Ser Lys Ala Ala Met  
                   610                  615                  620

Ser Ser Leu Gly Ala Ile Glu Ala Thr Gly Lys Pro  
                   625                  630                  635

<210> 143  
 <211> 682  
 <212> PRT  
 <213> Homo sapien

<400> 143

Met Thr Ser Ser Gly Pro Gly Pro Arg Phe Leu Leu Leu Leu Pro Leu  
                   1                  5                  10                  15

Leu Leu Pro Pro Ala Ala Ser Ala Ser Asp Arg Pro Arg Gly Arg Asp  
                   20                  25                  30

Pro Val Asn Pro Glu Lys Leu Leu Val Ile Thr Val Ala Thr Ala Glu  
                   35                  40                  45

Thr Glu Gly Tyr Leu Arg Phe Leu Arg Ser Ala Glu Phe Phe Asn Tyr  
                   50                  55                  60

Thr Val Arg Thr Leu Gly Leu Gly Glu Glu Trp Arg Gly Gly Asp Val  
                   65                  70                  75                  80

Ala Arg Thr Val Gly Gly Gly Gln Lys Val Arg Trp Leu Lys Lys Glu  
                   85                  90                  95

Met Glu Lys Tyr Ala Asp Arg Glu Asp Met Ile Ile Met Phe Val Asp  
                   100                  105                  110

Ser Tyr Asp Val Ile Leu Ala Gly Ser Pro Thr Glu Leu Leu Lys Lys  
                   115                  120                  125

Phe Val Gln Ser Gly Ser Arg Leu Leu Phe Ser Ala Glu Ser Phe Cys  
                   130                  135                  140

Trp Pro Glu Trp Gly Leu Ala Glu Gln Tyr Pro Glu Val Gly Thr Gly  
                   145                  150                  155                  160

Lys Arg Phe Leu Asn Ser Gly Gly Phe Ile Gly Phe Ala Thr Thr Ile  
 165 170 175

His Gln Ile Val Arg Gln Trp Lys Tyr Lys Asp Asp Asp Asp Gln  
 180 185 190

Leu Phe Tyr Thr Arg Leu Tyr Leu Asp Pro Gly Leu Arg Glu Lys Leu  
 195 200 205

Ser Leu Asn Leu Asp His Lys Ser Arg Ile Phe Gln Asn Leu Asn Gly  
 210 215 220

Ala Leu Asp Glu Val Val Leu Lys Phe Asp Arg Asn Arg Val Arg Ile  
 225 230 235 240

Arg Asn Val Ala Tyr Asp Thr Leu Pro Ile Val Val His Gly Asn Gly  
 245 250 255

Pro Thr Lys Leu Gln Leu Asn Tyr Leu Gly Asn Tyr Val Pro Asn Gly  
 260 265 270

Trp Thr Pro Glu Gly Gly Cys Gly Phe Cys Asn Gln Asp Arg Arg Thr  
 275 280 285

Leu Pro Gly Gly Gln Pro Pro Pro Arg Val Phe Leu Ala Val Phe Val  
 290 295 300

Glu Gln Pro Thr Pro Phe Leu Pro Arg Phe Leu Gln Arg Leu Leu Leu  
 305 310 315 320

Leu Asp Tyr Pro Pro Asp Arg Val Thr Leu Phe Leu His Asn Asn Glu  
 325 330 335

Val Phe His Glu Pro His Ile Ala Asp Ser Trp Pro Gln Leu Gln Asp  
 340 345 350

His Phe Ser Ala Val Lys Leu Val Gly Pro Glu Glu Ala Leu Ser Pro  
 355 360 365

Gly Glu Ala Arg Asp Met Ala Met Asp Leu Cys Arg Gln Asp Pro Glu  
 370 375 380

Cys Glu Phe Tyr Phe Ser Leu Asp Ala Asp Ala Val Leu Thr Asn Leu  
 385 390 395 400



Gln Thr Leu Arg Ile Leu Ile Glu Glu Asn Arg Lys Val Ile Ala Pro  
 405 410 415

Met Leu Ser Arg His Gly Lys Leu Trp Ser Asn Phe Trp Gly Ala Leu  
 420 425 430

Ser Pro Asp Glu Tyr Tyr Ala Arg Ser Glu Asp Tyr Val Glu Leu Val  
 435 440 445

Gln Arg Lys Arg Val Gly Val Trp Asn Val Pro Tyr Ile Ser Gln Ala  
 450 455 460

Tyr Val Ile Arg Gly Asp Thr Leu Arg Met Glu Leu Pro Gln Arg Asp  
 465 470 475 480

Val Phe Ser Gly Ser Asp Thr Asp Pro Asp Met Ala Phe Cys Lys Ser  
 485 490 495

Phe Arg Asp Lys Gly Ile Phe Leu His Leu Ser Asn Gln His Glu Phe  
 500 505 510

Gly Arg Leu Leu Ala Thr Ser Arg Tyr Asp Thr Glu His Leu His Pro  
 515 520 525

Asp Leu Trp Gln Ile Phe Asp Asn Pro Val Asp Trp Lys Glu Gln Tyr  
 530 535 540

Ile His Glu Asn Tyr Ser Arg Ala Leu Glu Gly Glu Gly Ile Val Glu  
 545 550 555 560

Gln Pro Cys Pro Asp Val Tyr Trp Phe Pro Leu Leu Ser Glu Gln Met  
 565 570 575

Cys Asp Glu Leu Val Ala Glu Met Glu His Tyr Gly Gln Trp Ser Gly  
 580 585 590

Gly Arg His Glu Val Arg Ala Trp Ala Arg Arg Ala Glu Ala Phe Pro  
 595 600 605

Glu Glu Glu Val Gln Asp Leu Val Asn Lys Gln Trp Asn Gln Glu Asn  
 610 615 620

Gly Ser Lys Glu Gly Phe Pro Gly Gly Arg Gln Thr Leu Gly Ser Gln  
 625 630 635 640

Leu His Ser Phe Met Tyr Ser Arg Asn Ile Tyr Cys Trp Ala Gln Trp  
                   645                                  650                                  655

Leu Met Pro Val Ile Leu Ala Leu Trp Glu Ala Glu Ala Gly Gly Leu  
                   660                                  665                                  670

Leu Glu Gln Gly Glu Phe Glu Ala Ser Leu  
                   675                                  680

<210> 144  
 <211> 654  
 <212> PRT  
 <213> Homo sapien

<400> 144

Met Thr Ser Ser Gly Pro Gly Pro Arg Phe Leu Leu Leu Leu Pro Leu  
   1                  5                                  10                                  15

Leu Leu Pro Pro Ala Ala Ser Ala Ser Asp Arg Pro Arg Gly Arg Asp  
                   20                                  25                                  30

Pro Val Asn Pro Glu Lys Leu Leu Val Ile Thr Val Ala Thr Ala Glu  
                   35                                  40                                  45

Thr Glu Gly Tyr Leu Arg Phe Leu Arg Ser Ala Glu Phe Phe Asn Tyr  
                   50                                  55                                  60

Thr Val Arg Thr Leu Gly Leu Gly Glu Glu Trp Arg Gly Gly Asp Val  
                   65                                  70                                  75                                  80

Ala Arg Thr Val Gly Gly Gly Gln Lys Val Arg Trp Leu Lys Lys Glu  
                   85                                  90                                  95

Met Glu Lys Tyr Ala Asp Arg Glu Asp Met Ile Ile Met Phe Val Asp  
                   100                                  105                                  110

Ser Tyr Asp Val Ile Leu Ala Gly Ser Pro Thr Glu Leu Leu Lys Lys  
                   115                                  120                                  125

Phe Val Gln Ser Gly Ser Arg Leu Leu Phe Ser Ala Glu Ser Phe Cys  
                   130                                  135                                  140

Trp Pro Glu Trp Gly Leu Ala Glu Gln Tyr Pro Glu Val Gly Thr Gly  
                   145                                  150                                  155                                  160

Lys Arg Phe Leu Asn Ser Gly Gly Phe Ile Gly Phe Ala Thr Thr Ile  
                   165                                  170                                  175

His Gln Ile Val Arg Gln Trp Lys Tyr Lys Asp Asp Asp Asp Asp Gln  
 180 185 190

Leu Phe Tyr Thr Arg Leu Tyr Leu Asp Pro Gly Leu Arg Glu Lys Leu  
 195 200 205

Ser Leu Asn Leu Asp His Lys Ser Arg Ile Phe Gln Asn Leu Asn Gly  
 210 215 220

Ala Leu Asp Glu Val Val Leu Lys Phe Asp Arg Asn Arg Val Arg Ile  
 225 230 235 240

Arg Asn Val Ala Tyr Asp Thr Leu Pro Ile Val Val His Gly Asn Gly  
 245 250 255

Pro Thr Lys Leu Gln Leu Asn Tyr Leu Gly Asn Tyr Val Pro Asn Gly  
 260 265 270

Trp Thr Pro Glu Gly Gly Cys Gly Phe Cys Asn Gln Asp Arg Arg Thr  
 275 280 285

Leu Pro Gly Gly Gln Pro Pro Pro Arg Val Phe Leu Ala Val Phe Val  
 290 295 300

Glu Gln Pro Thr Pro Phe Leu Pro Arg Phe Leu Gln Arg Leu Leu Leu  
 305 310 315 320

Leu Asp Tyr Pro Pro Asp Arg Val Thr Leu Phe Leu His Asn Asn Glu  
 325 330 335

Val Phe His Glu Pro His Ile Ala Asp Ser Trp Pro Gln Leu Gln Asp  
 340 345 350

His Phe Ser Ala Val Lys Leu Val Gly Pro Glu Glu Ala Leu Ser Pro  
 355 360 365

Gly Glu Ala Arg Asp Met Ala Met Asp Leu Cys Arg Gln Asp Pro Glu  
 370 375 380

Cys Glu Phe Tyr Phe Ser Leu Asp Ala Asp Ala Val Leu Thr Asn Leu  
 385 390 395 400

Gln Thr Leu Arg Ile Leu Ile Glu Glu Asn Arg Lys Val Ile Ala Pro  
 405 410 415

Met Leu Ser Arg His Gly Lys Leu Trp Ser Asn Phe Trp Gly Ala Leu  
 420 425 430

Ser Pro Asp Glu Tyr Tyr Ala Arg Ser Glu Asp Tyr Val Glu Leu Val  
 435 440 445

Gln Arg Lys Arg Val Gly Val Trp Asn Val Pro Tyr Ile Ser Gln Ala  
 450 455 460

Tyr Val Ile Arg Gly Asp Thr Leu Arg Met Glu Leu Pro Gln Arg Asp  
 465 470 475 480

Val Phe Ser Gly Ser Asp Thr Asp Pro Asp Met Ala Phe Cys Lys Ser  
 485 490 495

Phe Arg Asp Lys Gly Ile Phe Leu His Leu Ser Asn Gln His Glu Phe  
 500 505 510

Gly Arg Leu Leu Ala Thr Ser Arg Tyr Asp Thr Glu His Leu His Pro  
 515 520 525

Asp Leu Trp Gln Ile Phe Asp Asn Pro Val Asp Trp Lys Glu Gln Tyr  
 530 535 540

Ile His Glu Asn Tyr Ser Arg Ala Leu Glu Gly Glu Gly Ile Val Glu  
 545 550 555 560

Gln Pro Cys Pro Asp Val Tyr Trp Phe Pro Leu Leu Ser Glu Gln Met  
 565 570 575

Cys Asp Glu Leu Val Ala Glu Met Glu His Tyr Gly Gln Trp Ser Gly  
 580 585 590

Gly Arg His Glu Trp Glu Gly Thr Asn Gly Ala Gly Pro His Met Lys  
 595 600 605

Gly Gly Pro Gly Gln Val Ile Gly Ser Leu Ala Asp Asn Leu Ala Ala  
 610 615 620

Thr Gly Gly Gly Lys Gly Pro Ala Lys Ser Gly Pro Asn His Gln His  
 625 630 635 640

Arg Ala Arg Gly Gln Thr Gly Thr Pro Lys Gly Asp Thr Gly  
 645 650

<210> 145  
 <211> 669  
 <212> PRT  
 <213> Homo sapien

<220>  
 <221> MISC\_FEATURE  
 <222> (613)..(613)  
 <223> X=any amino acid

<400> 145

Arg Arg Ser Gln Asp Pro Gly Cys Cys Leu Gly Pro Leu Pro Thr Met  
 1 5 10 15

Thr Ser Ser Gly Pro Gly Pro Arg Phe Leu Leu Leu Leu Pro Leu Leu  
 20 25 30

Leu Pro Pro Ala Ala Ser Ala Ser Asp Arg Pro Arg Gly Arg Asp Pro  
 35 40 45

Val Asn Pro Glu Lys Leu Leu Val Ile Thr Val Ala Thr Ala Glu Thr  
 50 55 60

Glu Gly Tyr Leu Arg Phe Leu Arg Ser Ala Glu Phe Phe Asn Tyr Thr  
 65 70 75 80

Val Arg Thr Leu Gly Leu Gly Glu Glu Trp Arg Gly Gly Asp Val Ala  
 85 90 95

Arg Thr Val Gly Gly Gly Gln Lys Val Arg Trp Leu Lys Lys Glu Met  
 100 105 110

Glu Lys Tyr Ala Asp Arg Glu Asp Met Ile Ile Met Phe Val Asp Ser  
 115 120 125

Tyr Asp Val Ile Leu Ala Gly Ser Pro Thr Glu Leu Leu Lys Lys Phe  
 130 135 140

Val Gln Ser Gly Ser Arg Leu Leu Phe Ser Ala Glu Ser Phe Cys Trp  
 145 150 155 160

Pro Glu Trp Gly Leu Ala Glu Gln Tyr Pro Glu Val Gly Thr Gly Lys  
 165 170 175

Arg Phe Leu Asn Ser Gly Gly Phe Ile Gly Phe Ala Thr Thr Ile His  
 180 185 190

Gln Ile Val Arg Gln Trp Lys Tyr Lys Asp Asp Asp Asp Gln Leu  
 195 200 205

Phe Tyr Thr Arg Leu Tyr Leu Asp Pro Gly Leu Arg Glu Lys Leu Ser  
 210 215 220

Leu Asn Leu Asp His Lys Ser Arg Ile Phe Gln Asn Leu Asn Gly Ala  
 225 230 235 240

Leu Asp Glu Val Val Leu Lys Phe Asp Arg Asn Arg Val Arg Ile Arg  
 245 250 255

Asn Val Ala Tyr Asp Thr Leu Pro Ile Val Val His Gly Asn Gly Pro  
 260 265 270

Thr Lys Leu Gln Leu Asn Tyr Leu Gly Asn Tyr Val Pro Asn Gly Trp  
 275 280 285

Thr Pro Glu Gly Gly Cys Gly Phe Cys Asn Gln Asp Arg Arg Thr Leu  
 290 295 300

Pro Gly Gly Gln Pro Pro Pro Arg Val Phe Leu Ala Val Phe Val Glu  
 305 310 315 320

Gln Pro Thr Pro Phe Leu Pro Arg Phe Leu Gln Arg Leu Leu Leu Leu  
 325 330 335

Asp Tyr Pro Pro Asp Arg Val Thr Leu Phe Leu His Asn Asn Glu Val  
 340 345 350

Phe His Glu Pro His Ile Ala Asp Ser Trp Pro Gln Leu Gln Asp His  
 355 360 365

Phe Ser Ala Val Lys Leu Val Gly Pro Glu Glu Ala Leu Ser Pro Gly  
 370 375 380

Glu Ala Arg Asp Met Ala Met Asp Leu Cys Arg Gln Asp Pro Glu Cys  
 385 390 395 400

Glu Phe Tyr Phe Ser Leu Asp Ala Asp Ala Val Leu Thr Asn Leu Gln  
 405 410 415

Thr Leu Arg Ile Leu Ile Glu Glu Asn Arg Lys Val Ile Ala Pro Met  
 420 425 430

Leu Ser Arg His Gly Lys Leu Trp Ser Asn Phe Trp Gly Ala Leu Ser

435                                      440                                      445  
 Pro Asp Glu Tyr Tyr Ala Arg Ser Glu Asp Tyr Val Glu Leu Val Gln  
     450                                      455                                      460  
 Arg Lys Arg Val Gly Val Trp Asn Val Pro Tyr Ile Ser Gln Ala Tyr  
     465                                      470                                      475                                      480  
 Val Ile Arg Gly Asp Thr Leu Arg Met Glu Leu Pro Gln Arg Asp Val  
                                     485                                      490                                      495  
 Phe Ser Gly Ser Asp Thr Asp Pro Asp Met Ala Phe Cys Lys Ser Phe  
                                     500                                      505                                      510  
 Arg Asp Lys Gly Ile Phe Leu His Leu Ser Asn Gln His Glu Phe Gly  
                                     515                                      520                                      525  
 Arg Leu Leu Ala Thr Ser Arg Tyr Asp Thr Glu His Leu His Pro Asp  
     530                                      535                                      540  
 Leu Trp Gln Ile Phe Asp Asn Pro Val Asp Trp Lys Glu Gln Tyr Ile  
     545                                      550                                      555                                      560  
 His Glu Asn Tyr Ser Arg Ala Leu Glu Gly Glu Gly Ile Val Glu Gln  
                                     565                                      570                                      575  
 Pro Cys Pro Asp Val Tyr Trp Phe Pro Leu Leu Ser Glu Gln Met Cys  
                                     580                                      585                                      590  
 Asp Glu Leu Val Ala Glu Met Glu His Tyr Gly Gln Trp Ser Gly Gly  
                                     595                                      600                                      605  
 Arg His Glu Trp Xaa Gly Thr Asn Gly Ala Gly Pro His Met Lys Gly  
     610                                      615                                      620  
 Gly Pro Gly Gln Val Ile Gly Ser Leu Ala Asp Asn Leu Ala Ala Thr  
     625                                      630                                      635                                      640  
 Gly Gly Gly Lys Gly Pro Ala Lys Ser Gly Pro Asn His Gln His Arg  
                                     645                                      650                                      655  
 Ala Arg Gly Gln Thr Gly Thr Pro Lys Gly Asp Thr Gly  
                                     660                                      665

&lt;210&gt; 146

&lt;211&gt; 411

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 146

Met Gln Gly Pro Tyr Val Gln Gly Leu Gly Tyr Pro Glu Gly Arg Arg  
 1 5 10 15

Thr Ser Arg Asp Glu Leu Gly Arg Ile Trp Gly Ala Val Leu Pro Ala  
 20 25 30

Asp Arg Gly Val Gly Ala Ser Arg Gly Gly Val Trp Asn Val Pro Tyr  
 35 40 45

Ile Ser Gln Ala Tyr Val Ile Arg Gly Asp Thr Leu Arg Met Glu Leu  
 50 55 60

Pro Gln Arg Asp Val Phe Ser Gly Ser Asp Thr Asp Pro Asp Met Ala  
 65 70 75 80

Phe Cys Lys Ser Phe Arg Asp Lys Val Ser Ala Gly Ala Arg Ser Gly  
 85 90 95

Leu Gly Ala Val Pro Gln Thr Pro Gly Ile Ala Cys Ile Thr Asp Thr  
 100 105 110

Pro Thr Pro Leu Thr Gly Ile Phe Leu His Leu Ser Asn Gln His Glu  
 115 120 125

Phe Gly Arg Leu Leu Ala Thr Ser Arg Tyr Asp Thr Glu His Leu His  
 130 135 140

Pro Asp Leu Trp Gln Ile Phe Asp Asn Pro Val Val Ser Gly Asp Pro  
 145 150 155 160

Ser Pro Glu His Thr Gly Ser Pro Pro Cys Ala Lys Glu Asp Thr Lys  
 165 170 175

Arg Asp Gly Cys Cys Gln Arg Arg Thr Leu Ser Gly Arg Gly Arg Ser  
 180 185 190

Pro Gly Gly Trp Glu Arg Gly Gly His Arg Ser Asp Val Pro Pro Thr  
 195 200 205

Leu Ser Gln Asp Trp Lys Glu Gln Tyr Ile His Glu Asn Tyr Ser Arg  
 210 215 220



245/383

Ala Leu Glu Gly Glu Gly Ile Val Glu Gln Pro Cys Pro Asp Val Tyr  
 225 230 235 240

Trp Phe Pro Leu Leu Ser Glu Gln Met Cys Asp Glu Leu Val Ala Glu  
 245 250 255

Met Glu His Tyr Gly Gln Trp Ser Gly Gly Arg His Glu Asp Ser Arg  
 260 265 270

Leu Ala Gly Gly Tyr Glu Asn Val Pro Thr Val Asp Ile His Met Lys  
 275 280 285

Gln Val Gly Tyr Glu Asp Gln Trp Leu Gln Leu Leu Arg Thr Tyr Val  
 290 295 300

Gly Pro Met Thr Glu Ser Leu Phe Pro Gly Tyr His Thr Lys Ala Arg  
 305 310 315 320

Ala Val Met Asn Phe Val Val Arg Tyr Arg Pro Asp Glu Gln Pro Ser  
 325 330 335

Leu Arg Pro His His Asp Ser Ser Thr Phe Thr Leu Asn Val Ala Leu  
 340 345 350

Asn His Lys Gly Leu Asp Tyr Glu Gly Gly Gly Cys Arg Phe Leu Arg  
 355 360 365

Tyr Asp Cys Val Ile Ser Ser Pro Arg Lys Gly Trp Ala Leu Leu His  
 370 375 380

Pro Gly Arg Leu Thr His Tyr His Glu Gly Leu Pro Thr Thr Trp Gly  
 385 390 395 400

Thr Arg Tyr Ile Met Val Ser Phe Val Asp Pro  
 405 410

<210> 147  
 <211> 255  
 <212> PRT  
 <213> Homo sapien

<400> 147

Val Gly Thr Pro Arg Pro Glu His Thr Gly Ser Pro Pro Cys Ala Lys  
 1 5 10 15

Glu Asp Thr Lys Arg Asp Gly Cys Cys Gln Arg Arg Thr Leu Ser Gly  
 20 25 30

Arg Gly Arg Ser Pro Gly Gly Trp Glu Arg Gly Gly His Arg Ser Asp  
 35 40 45

Val Pro Pro Thr Leu Ser Gln Asp Trp Lys Glu Gln Tyr Ile His Glu  
 50 55 60

Asn Tyr Ser Arg Ala Leu Glu Gly Glu Gly Ile Val Glu Gln Pro Cys  
 65 70 75 80

Pro Asp Val Tyr Trp Phe Pro Leu Leu Ser Glu Gln Met Cys Asp Glu  
 85 90 95

Leu Val Ala Glu Met Glu His Tyr Gly Gln Trp Ser Gly Gly Arg His  
 100 105 110

Glu Asp Ser Arg Leu Ala Gly Gly Tyr Glu Asn Val Pro Thr Val Asp  
 115 120 125

Ile His Met Lys Gln Val Gly Tyr Glu Asp Gln Trp Leu Gln Leu Leu  
 130 135 140

Arg Thr Tyr Val Gly Pro Met Thr Glu Ser Leu Phe Pro Gly Tyr His  
 145 150 155 160

Thr Lys Ala Arg Ala Val Met Asn Phe Val Val Arg Tyr Arg Pro Asp  
 165 170 175

Glu Gln Pro Ser Leu Arg Pro His His Asp Ser Ser Thr Phe Thr Leu  
 180 185 190

Asn Val Ala Leu Asn His Lys Gly Leu Asp Tyr Glu Gly Gly Gly Cys  
 195 200 205

Arg Phe Leu Arg Tyr Asp Cys Val Ile Ser Ser Pro Arg Lys Gly Trp  
 210 215 220

Ala Leu Leu His Pro Gly Arg Leu Thr His Tyr His Glu Gly Leu Pro  
 225 230 235 240

Thr Thr Trp Gly Thr Arg Tyr Ile Met Val Ser Phe Val Asp Pro  
 245 250 255

<210> 148  
 <211> 312  
 <212> PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 148

Met Arg Ser Pro Glu Leu Ala Leu Pro Arg Gly Met Gln Pro Thr Glu  
 1 5 10 15

Phe Phe Gln Ser Leu Gly Gly Asp Gly Glu Arg Asn Val Gln Ile Glu  
 20 25 30

Met Ala His Gly Thr Thr Thr Leu Ala Phe Lys Phe Gln His Gly Val  
 35 40 45

Ile Ala Ala Val Asp Ser Arg Ala Ser Ala Gly Ser Tyr Ile Ser Ala  
 50 55 60

Leu Arg Val Asn Lys Val Ile Glu Ile Asn Pro Tyr Leu Leu Gly Thr  
 65 70 75 80

Met Ser Gly Cys Ala Ala Asp Cys Gln Tyr Trp Glu Arg Leu Leu Ala  
 85 90 95

Lys Glu Cys Arg Leu Tyr Tyr Leu Arg Asn Gly Glu Arg Ile Ser Val  
 100 105 110

Ser Ala Ala Ser Lys Leu Leu Ser Asn Met Met Cys Gln Tyr Arg Gly  
 115 120 125

Met Gly Leu Ser Met Gly Ser Met Ile Cys Gly Trp Asp Lys Lys Gly  
 130 135 140

Pro Gly Leu Tyr Tyr Val Asp Glu His Gly Thr Arg Leu Ser Gly Asn  
 145 150 155 160

Met Phe Ser Thr Gly Ser Gly Asn Thr Tyr Ala Tyr Gly Val Met Asp  
 165 170 175

Ser Gly Tyr Arg Pro Asn Leu Ser Pro Glu Glu Ala Tyr Asp Leu Gly  
 180 185 190

Arg Arg Ala Ile Ala Tyr Ala Thr His Arg Asp Ser Tyr Ser Gly Gly  
 195 200 205

Val Val Asn Met Ser Thr Val Ser Ser Trp Ser Gly Pro Leu Glu Arg  
 210 215 220

Pro Met Ser Cys Pro Val Cys Pro Ser Gly Ser Ala Ser Ile Ala Ala

225					230					235						240
Gly	Ala	Gly	Gly	Arg	Pro	Gly	Arg	Thr	Cys	Gly	Pro	Pro	Gly	His	Thr	
				245					250					255		
Leu	Ser	Pro	Gly	Lys	Lys	Gly	Val	Val	Cys	Gln	Gln	Lys	Val	Val	Ser	
			260					265					270			
Thr	Ser	Gly	Lys	His	Met	Gly	Arg	Tyr	Lys	Ser	Arg	Val	Cys	Ala	Ala	
		275					280					285				
Lys	Met	Ile	Ile	Ile	Gly	Gly	Gly	Ser	Thr	Pro	Tyr	Pro	Tyr	Asn	Gly	
	290					295					300					
Ser	Arg	Val	His	Thr	Ser	Tyr	Tyr									
305					310											
<210>	149															
<211>	299															
<212>	PRT															
<213>	Homo sapien															
<400>	149															
Leu	Ser	Phe	Ser	Arg	Lys	Arg	Gln	Gly	Asp	Val	Glu	Lys	Ser	Leu	Val	
1				5					10					15		
Pro	Ser	Pro	Ser	Ile	Cys	Gly	Phe	Arg	Phe	His	Phe	Leu	Leu	Arg	Glu	
			20					25					30			
Arg	Thr	Asp	Leu	Trp	Val	Leu	Gly	Gly	His	Gly	Ala	Thr	Arg	Cys	Met	
		35					40					45				
Arg	Ser	Pro	Arg	Gly	Gln	Arg	Pro	Glu	Ser	Ala	Leu	Pro	Val	Ala	Gly	
	50					55					60					
Ser	Gly	Arg	Arg	Ser	Asp	Pro	Gly	His	Tyr	Ser	Phe	Ser	Met	Arg	Ser	
65					70					75					80	
Pro	Glu	Leu	Ala	Leu	Pro	Arg	Gly	Met	Gln	Pro	Thr	Glu	Phe	Phe	Gln	
				85					90					95		
Ser	Leu	Gly	Gly	Asp	Gly	Glu	Arg	Asn	Val	Gln	Ile	Glu	Met	Ala	His	
			100					105					110			
Gly	Thr	Thr	Thr	Leu	Ala	Phe	Lys	Phe	Gln	His	Gly	Val	Ile	Ala	Ala	
			115				120					125				

Val Asp Ser Arg Ala Ser Ala Gly Ser Tyr Ile Ser Ala Leu Arg Val  
 130 135 140

Asn Lys Val Ile Glu Ile Asn Pro Tyr Leu Leu Gly Thr Met Ser Gly  
 145 150 155 160

Cys Ala Ala Asp Cys Gln Tyr Trp Glu Arg Leu Leu Ala Lys Glu Cys  
 165 170 175

Arg Leu Tyr Tyr Leu Arg Asn Gly Glu Arg Ile Ser Val Ser Ala Ala  
 180 185 190

Ser Lys Leu Leu Ser Asn Met Met Cys Gln Tyr Arg Gly Met Gly Leu  
 195 200 205

Ser Met Gly Ser Met Ile Cys Gly Trp Asp Lys Lys Gly Pro Gly Leu  
 210 215 220

Tyr Tyr Val Asp Glu His Gly Thr Arg Leu Ser Gly Asn Met Phe Ser  
 225 230 235 240

Thr Gly Ser Gly Asn Thr Tyr Ala Tyr Gly Val Met Asp Ser Gly Tyr  
 245 250 255

Arg Pro Asn Leu Ser Pro Glu Glu Ala Tyr Asp Leu Gly Arg Arg Ala  
 260 265 270

Ile Ala Tyr Ala Thr His Arg Asp Ser Tyr Ser Gly Gly Val Val Asn  
 275 280 285

Met Ser Thr Val Ser Ser Trp Ser Arg Ala Thr  
 290 295

<210> 150

<211> 274

<212> PRT

<213> Homo sapien

<400> 150

Met Arg Ser Pro Glu Leu Ala Leu Pro Arg Gly Met Gln Pro Thr Glu  
 1 5 10 15

Phe Phe Gln Ser Leu Gly Gly Asp Gly Glu Arg Asn Val Gln Ile Glu  
 20 25 30

Met Ala His Gly Thr Thr Thr Leu Ala Phe Lys Phe Gln His Gly Val

35	40	45	
Ile	Ala	Ala	Val Asp Ser Arg Ala Ser Ala Gly Ser Tyr Ile Ser Ala
50			55 60
Leu	Arg	Val	Asn Lys Val Ile Glu Ile Asn Pro Tyr Leu Leu Gly Thr
65			70 75 80
Met	Ser	Gly	Cys Ala Ala Asp Cys Gln Tyr Trp Glu Arg Leu Leu Ala
			85 90 95
Lys	Glu	Cys	Arg Leu Tyr Tyr Leu Arg Asn Gly Glu Arg Ile Ser Val
			100 105 110
Ser	Ala	Ala	Ser Lys Leu Leu Ser Asn Met Met Cys Gln Tyr Arg Gly
			115 120 125
Met	Gly	Leu	Ser Met Gly Ser Met Ile Cys Gly Trp Asp Lys Lys Gly
			130 135 140
Pro	Gly	Leu	Tyr Tyr Val Asp Glu His Gly Thr Arg Leu Ser Gly Asn
145			150 155 160
Met	Phe	Ser	Thr Gly Ser Gly Asn Thr Tyr Ala Tyr Gly Val Met Asp
			165 170 175
Ser	Gly	Tyr	Arg Pro Asn Leu Ser Pro Glu Glu Ala Tyr Asp Leu Gly
			180 185 190
Arg	Arg	Ala	Ile Ala Tyr Ala Thr His Arg Asp Ser Tyr Ser Gly Gly
			195 200 205
Val	Val	Asn	Ile Pro Glu Asp Gly Gly Asp Ser Glu Arg Pro Phe Gly
			210 215 220
Arg	Ala	Ser	Arg Asp His Gln Gly Gly Gly Gly Arg Pro Arg Gly Gly
225			230 235 240
Ser	Gly	Thr	Pro Phe Arg Lys Ser Arg Lys Val Ser Arg Gly Gly Cys
			245 250 255
Leu	Asn	Gln	Trp Pro Lys Lys Gly Pro Ala Ala Tyr Trp Arg Ser Ser
			260 265 270
Thr	Tyr		

<210> 151  
 <211> 294  
 <212> PRT  
 <213> Homo sapien

<400> 151

Leu Ser Phe Ser Arg Lys Arg Gln Gly Asp Val Glu Lys Ser Leu Val  
 1 5 10 15

Pro Ser Pro Ser Ile Cys Gly Phe Arg Phe His Phe Leu Leu Arg Glu  
 20 25 30

Arg Thr Asp Leu Trp Val Leu Gly Gly His Gly Ala Thr Arg Cys Met  
 35 40 45

Arg Ser Pro Arg Gly Gln Arg Pro Glu Ser Ala Leu Pro Val Ala Gly  
 50 55 60

Ser Gly Arg Arg Ser Asp Pro Gly His Tyr Ser Phe Ser Met Arg Ser  
 65 70 75 80

Pro Glu Leu Ala Leu Pro Arg Gly Met Gln Pro Thr Glu Phe Phe Gln  
 85 90 95

Ser Leu Gly Gly Asp Gly Glu Arg Asn Val Gln Ile Glu Met Ala His  
 100 105 110

Gly Thr Thr Thr Leu Ala Phe Lys Phe Gln His Gly Val Ile Ala Ala  
 115 120 125

Val Asp Ser Arg Ala Ser Ala Gly Ser Tyr Ile Ser Ala Leu Arg Val  
 130 135 140

Asn Lys Val Ile Glu Ile Asn Pro Tyr Leu Leu Gly Thr Met Ser Gly  
 145 150 155 160

Cys Ala Ala Asp Cys Gln Tyr Trp Glu Arg Leu Leu Ala Lys Glu Cys  
 165 170 175

Arg Leu Tyr Tyr Leu Arg Asn Gly Glu Arg Ile Ser Val Ser Ala Ala  
 180 185 190

Ser Lys Leu Leu Ser Asn Met Met Cys Gln Tyr Arg Gly Met Gly Leu  
 195 200 205

252/383

Ser Met Gly Ser Met Ile Cys Gly Trp Asp Lys Lys Gly Pro Gly Leu  
 210 215 220

Tyr Tyr Val Asp Glu His Gly Thr Arg Leu Ser Gly Asn Met Phe Ser  
 225 230 235 240

Thr Gly Ser Gly Asn Thr Tyr Ala Tyr Gly Val Met Asp Ser Gly Tyr  
 245 250 255

Arg Pro Asn Leu Ser Pro Glu Glu Ala Tyr Asp Leu Gly Arg Arg Ala  
 260 265 270

Ile Ala Tyr Ala Thr His Arg Asp Ser Tyr Ser Gly Gly Val Val Asn  
 275 280 285

Ile Pro Glu Glu Trp Trp  
 290

<210> 152  
 <211> 237  
 <212> PRT  
 <213> Homo sapien

<400> 152

Met Arg Ser Pro Glu Leu Ala Leu Pro Arg Gly Met Gln Pro Thr Glu  
 1 5 10 15

Phe Phe Gln Ser Leu Gly Gly Asp Gly Glu Arg Asn Val Gln Ile Glu  
 20 25 30

Met Ala His Gly Thr Thr Thr Leu Ala Phe Lys Phe Gln His Gly Val  
 35 40 45

Ile Ala Ala Val Asp Ser Arg Ala Ser Ala Gly Ser Tyr Ile Ser Ala  
 50 55 60

Leu Arg Val Asn Lys Val Ile Glu Ile Asn Pro Tyr Leu Leu Gly Thr  
 65 70 75 80

Met Ser Gly Cys Ala Ala Asp Cys Gln Tyr Trp Glu Arg Leu Leu Ala  
 85 90 95

Lys Glu Cys Arg Leu Tyr Tyr Leu Arg Asn Gly Glu Arg Ile Ser Val  
 100 105 110

Ser Ala Ala Ser Lys Leu Leu Ser Asn Met Met Cys Gln Tyr Arg Gly  
 115 120 125



Met Gly Leu Ser Met Gly Ser Met Ile Cys Gly Trp Asp Lys Lys Gly  
 130 135 140

Pro Gly Leu Tyr Tyr Val Asp Glu His Gly Thr Arg Leu Ser Gly Asn  
 145 150 155 160

Met Phe Ser Thr Gly Ser Gly Asn Thr Tyr Ala Tyr Gly Val Met Asp  
 165 170 175

Ser Gly Tyr Arg Pro Asn Leu Ser Pro Glu Glu Ala Tyr Asp Leu Gly  
 180 185 190

Arg Arg Ala Ile Ala Tyr Ala Thr His Arg Asp Ser Tyr Ser Gly Gly  
 195 200 205

Val Val Asn Met Tyr His Ile Asp Thr Thr Met Val Gly Glu Ser Lys  
 210 215 220

Val Asp Val Asp Leu Cys Pro Pro Glu Ala Gln Ser Gly  
 225 230 235

<210> 153

<211> 297

<212> PRT

<213> Homo sapien

<220>

<221> MISC\_FEATURE

<222> (297)..(297)

<223> X=any amino acid

<400> 153

Leu Ser Phe Ser Arg Lys Arg Gln Gly Asp Val Glu Lys Ser Leu Val  
 1 5 10 15

Pro Ser Pro Ser Ile Cys Gly Phe Arg Phe His Phe Leu Leu Arg Glu  
 20 25 30

Arg Thr Asp Leu Trp Val Leu Gly Gly His Gly Ala Thr Arg Cys Met  
 35 40 45

Arg Ser Pro Arg Gly Gln Arg Pro Glu Ser Ala Leu Pro Val Ala Gly  
 50 55 60

Ser Gly Arg Arg Ser Asp Pro Gly His Tyr Ser Phe Ser Met Arg Ser  
 65 70 75 80

Pro Glu Leu Ala Leu Pro Arg Gly Met Gln Pro Thr Glu Phe Phe Gln  
                                     85                                    90                                    95

Ser Leu Gly Gly Asp Gly Glu Arg Asn Val Gln Ile Glu Met Ala His  
                                     100                                    105                                    110

Gly Thr Thr Thr Leu Ala Phe Lys Phe Gln His Gly Val Ile Ala Ala  
                                     115                                    120                                    125

Val Asp Ser Arg Ala Ser Ala Gly Ser Tyr Ile Ser Ala Leu Arg Val  
                                     130                                    135                                    140

Asn Lys Val Ile Glu Ile Asn Pro Tyr Leu Leu Gly Thr Met Ser Gly  
                                     145                                    150                                    155                                    160

Cys Ala Ala Asp Cys Gln Tyr Trp Glu Arg Leu Leu Ala Lys Glu Cys  
                                     165                                    170                                    175

Arg Leu Tyr Tyr Leu Arg Asn Gly Glu Arg Ile Ser Val Ser Ala Ala  
                                     180                                    185                                    190

Ser Lys Leu Leu Ser Asn Met Met Cys Gln Tyr Arg Gly Met Gly Leu  
                                     195                                    200                                    205

Ser Met Gly Ser Met Ile Cys Gly Trp Asp Lys Lys Gly Pro Gly Leu  
                                     210                                    215                                    220

Tyr Tyr Val Asp Glu His Gly Thr Arg Leu Ser Gly Asn Met Phe Ser  
                                     225                                    230                                    235                                    240

Thr Gly Ser Gly Asn Thr Tyr Ala Tyr Gly Val Met Asp Ser Gly Tyr  
                                     245                                    250                                    255

Arg Pro Asn Leu Ser Pro Glu Glu Ala Tyr Asp Leu Gly Arg Arg Ala  
                                     260                                    265                                    270

Ile Ala Tyr Ala Thr His Arg Asp Ser Tyr Ser Gly Gly Val Val Asn  
                                     275                                    280                                    285

Met Tyr His Ile Glu Arg Asp Gly Xaa  
                                     290                                    295

<210> 154  
 <211> 260  
 <212> PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 154

Met Asp Ser Ser Leu Pro Asn Ala Gln His Asp Val Gln Gly Leu Ser  
 1 5 10 15

Pro Gln Glu Asn Leu Ser Pro Pro Ser Phe Pro Thr Ser Ser His Pro  
 20 25 30

Gln Val Cys Gln Lys Ser Gly Glu Ile Ser Leu Leu Lys Gln Gln Leu  
 35 40 45

Lys Glu Ser Gln Ala Glu Leu Val Gln Lys Gly Ser Glu Leu Val Ala  
 50 55 60

Leu Arg Val Ala Leu Arg Glu Ala Arg Ala Thr Leu Arg Val Ser Glu  
 65 70 75 80

Gly Arg Ala Arg Gly Leu Gln Glu Ala Ala Arg Ala Arg Glu Leu Glu  
 85 90 95

Leu Glu Ala Cys Ser Gln Glu Leu Gln Arg His Arg Gln Glu Ala Glu  
 100 105 110

Gln Leu Arg Glu Lys Ala Gly Gln Leu Asp Ala Glu Ala Ala Gly Leu  
 115 120 125

Arg Glu Pro Pro Val Pro Pro Ala Thr Ala Asp Pro Phe Leu Leu Ala  
 130 135 140

Glu Ser Asp Glu Ala Lys Val Gln Arg Ala Ala Ala Gly Val Gly Gly  
 145 150 155 160

Ser Leu Arg Ala Gln Val Glu Arg Leu Arg Val Glu Leu Gln Arg Glu  
 165 170 175

Arg Arg Arg Gly Glu Glu Gln Arg Asp Ser Phe Glu Gly Glu Arg Leu  
 180 185 190

Ala Trp Gln Ala Glu Lys Glu Gln Val Ile Arg Tyr Gln Lys Gln Leu  
 195 200 205

Gln His Asn Tyr Ile Gln Met Tyr Arg Arg Asn Arg Gln Leu Glu Gln  
 210 215 220

Glu Leu Gln Gln Leu Ser Leu Glu Leu Glu Ala Arg Glu Leu Ala Asp

225                    230                    235                    240

Leu Gly Leu Ala Glu Gln Ala Pro Cys Ile Cys Leu Glu Glu Ile Thr  
                       245                    250                    255

Ala Thr Glu Ile  
                       260

<210> 155  
<211> 249  
<212> PRT  
<213> Homo sapien

<400> 155

Cys Ala Gly Pro Val Pro Pro Gly Glu Pro Val Ser Pro Ser Phe Pro  
1                    5                    10                    15

Thr Ser Ser His Pro Gln Val Cys Gln Lys Ser Gly Glu Ile Ser Leu  
                       20                    25                    30

Leu Lys Gln Gln Leu Lys Glu Ser Gln Ala Glu Leu Val Gln Lys Gly  
                       35                    40                    45

Ser Glu Leu Val Ala Leu Arg Val Ala Leu Arg Glu Ala Arg Ala Thr  
50                    55                    60

Leu Arg Val Ser Glu Gly Arg Ala Arg Gly Leu Gln Glu Ala Ala Arg  
65                    70                    75                    80

Ala Arg Glu Leu Glu Leu Glu Ala Cys Ser Gln Glu Leu Gln Arg His  
                       85                    90                    95

Arg Gln Glu Ala Glu Gln Leu Arg Glu Lys Ala Gly Gln Leu Asp Ala  
                       100                    105                    110

Glu Ala Ala Gly Leu Arg Glu Pro Pro Val Pro Pro Ala Thr Ala Asp  
                       115                    120                    125

Pro Phe Leu Leu Ala Glu Ser Asp Glu Ala Lys Val Gln Arg Ala Ala  
130                    135                    140

Ala Gly Val Gly Gly Ser Leu Arg Ala Gln Val Glu Arg Leu Arg Val  
145                    150                    155                    160

Glu Leu Gln Arg Glu Arg Arg Arg Gly Glu Glu Gln Arg Asp Ser Phe  
                       165                    170                    175

Glu Gly Glu Arg Leu Ala Trp Gln Ala Glu Lys Glu Gln Val Ile Arg  
                           180                          185                          190

Tyr Gln Lys Gln Leu Gln His Asn Tyr Ile Gln Met Tyr Arg Arg Asn  
                   195                          200                          205

Arg Gln Leu Glu Gln Glu Leu Gln Gln Leu Ser Leu Glu Leu Glu Ala  
           210                          215                          220

Arg Glu Leu Ala Asp Leu Gly Leu Ala Glu Gln Ala Pro Cys Ile Cys  
   225                          230                          235                          240

Leu Glu Glu Ile Thr Ala Thr Glu Ile  
                           245

<210> 156  
 <211> 132  
 <212> PRT  
 <213> Homo sapien

<400> 156

Met Arg Gly Ser His Leu Pro Gln Pro Gln Thr His Phe Ser Lys Trp  
   1                          5                          10                          15

Ser Leu His Leu Pro Leu Leu Leu Phe Arg Ala Pro Arg Ala Gly Ala  
                   20                          25                          30

Gly Leu Ala Gly Pro Gly Phe Pro Asp Ser Trp Leu Trp Leu Pro Gly  
           35                          40                          45

Cys Val Ala Leu Arg Ala Arg Leu Cys Gly Thr Leu Asp Leu Trp Ala  
   50                          55                          60

Leu Gly Ser Val Gly Leu Gly Gly Pro Gly Ser Leu Gly Pro Ala Gly  
   65                          70                          75                          80

Cys Pro Leu Val Gly Leu Thr Leu Gly Pro Leu Arg Val Phe Val Ser  
                           85                          90                          95

Phe Gly Ser Leu Ser Phe Ser Glu Pro Val Ser Phe Leu Gln Phe Ser  
                   100                          105                          110

Leu Ser Pro Cys Ser Leu Lys Trp Gly Asn Ala Thr Glu Val Pro Ala  
           115                          120                          125

Pro Leu Ala Pro

130

<210> 157  
<211> 225  
<212> PRT  
<213> Homo sapien  
  
<220>  
<221> MISC\_FEATURE  
<222> (23)..(23)  
<223> X=any amino acid

&lt;400&gt; 157

Ala Trp Ser Ser Ala Ala Glu Val Arg Gly Ala Gly Ser Gly Arg Arg  
1 5 10 15  
Pro Gly Glu Pro Pro Thr Xaa Ala Arg Trp Asn Pro Ala Gly Gly Thr  
20 25 30  
Ala Phe Pro Ser Arg Pro His Phe Leu Glu Gly Gly Leu Asp Ser Gly  
35 40 45  
Glu Trp Val Arg Gly Ser Trp Leu Pro Ala Ala Glu Trp Glu Leu Val  
50 55 60  
Ile Ala Asp Leu Thr Pro Leu Asp Trp Ser Leu Glu Phe Gly Trp Glu  
65 70 75 80  
Gly Asp Phe Pro Gln Leu Phe Arg Ser Val Ser Gly Pro Glu Pro Ala  
85 90 95  
Pro Ala Leu Cys Ser Pro Gln Pro Thr Lys Arg Gly Val Leu Leu Gly  
100 105 110  
Gln Ser Asp Cys Ser Gly Ser Ala Gly Glu Asn Glu Gly Phe Pro Ser  
115 120 125  
Pro Thr Ala Thr Asn Ala Phe Leu Lys Met Glu Pro Pro Leu Ala Pro  
130 135 140  
Pro Ser Leu Ser Gly Ser Lys Ser Gly Ser Arg Pro Gly Trp Ala Trp  
145 150 155 160  
Leu Ser Arg Leu Leu Ala Leu Ala Pro Trp Met Cys Gly Ser Gln Gly  
165 170 175  
Pro Ala Leu Trp His Phe Gly Leu Met Gly Pro Arg Leu Arg Gly Val

180 185 190  
 Gly Gly Pro Trp Leu Thr Gly Ser Arg Trp Leu Ser Pro Cys Arg Pro  
 195 200 205  
 Asp Pro Arg Ala Ser Pro Ser Leu Cys Leu Phe Trp Val Pro Val Phe  
 210 215 220  
 Leu  
 225.  
 <210> 158  
 <211> 451  
 <212> PRT  
 <213> Homo sapien  
 <400> 158  
 Ala Ser Ala Thr Met Ala Ile Val Gln Thr Leu Pro Val Pro Leu Glu  
 1 5 10 15  
 Pro Ala Pro Glu Ala Ala Thr Ala Pro Gln Ala Pro Val Met Gly Ser  
 20 25 30  
 Val Ser Ser Leu Ile Ser Gly Arg Pro Cys Pro Gly Gly Pro Ala Pro  
 35 40 45  
 Pro Arg His His Gly Pro Pro Gly Pro Thr Phe Phe Arg Gln Gln Asp  
 50 55 60  
 Gly Leu Leu Arg Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala  
 65 70 75 80  
 Val Pro Pro Arg Lys Ala Val Pro Val Thr Ser Phe Thr Tyr Ile Asn  
 85 90 95  
 Glu Asp Phe Arg Thr Glu Ser Pro Pro Ser Pro Ser Ser Asp Val Glu  
 100 105 110  
 Asp Ala Arg Glu Gln Arg Ala His Asn Ala His Leu Arg Gly Pro Pro  
 115 120 125  
 Pro Lys Leu Ile Pro Val Ser Gly Lys Leu Glu Lys Asn Met Glu Lys  
 130 135 140  
 Ile Leu Ile Arg Pro Thr Ala Phe Lys Pro Val Leu Pro Lys Pro Arg  
 145 150 155 160

Gly Ala Pro Ser Leu Pro Ser Phe Met Gly Pro Arg Ala Thr Gly Leu  
 165 170 175

Ser Gly Ser Gln Gly Ser Leu Thr Gln Leu Phe Gly Gly Pro Ala Ser  
 180 185 190

Ser Ser Ser Ser Ser Ser Ser Ser Ser Ala Ala Asp Lys Pro Leu Ala  
 195 200 205

Phe Ser Gly Trp Ala Ser Gly Cys Pro Ser Gly Thr Leu Ser Asp Ser  
 210 215 220

Gly Arg Asn Ser Leu Ser Ser Leu Pro Thr Tyr Ser Thr Gly Gly Ala  
 225 230 235 240

Glu Pro Thr Thr Ser Ser Pro Gly Gly His Leu Pro Ser His Gly Ser  
 245 250 255

Gly Arg Gly Ala Leu Pro Gly Pro Ala Arg Gly Val Pro Thr Gly Pro  
 260 265 270

Ser His Ser Asp Ser Gly Arg Ser Ser Ser Ser Lys Ser Thr Gly Ser  
 275 280 285

Leu Gly Gly Arg Val Ala Gly Gly Leu Leu Gly Ser Gly Thr Arg Ala  
 290 295 300

Ser Pro Asp Ser Ser Ser Cys Gly Glu Arg Ser Pro Pro Pro Pro Pro  
 305 310 315 320

Pro Pro Pro Ser Asp Glu Ala Leu Leu His Cys Val Leu Glu Gly Lys  
 325 330 335

Leu Arg Asp Arg Glu Ala Glu Leu Gln Gln Leu Arg Asp Ser Leu Asp  
 340 345 350

Glu Asn Glu Ala Thr Met Cys Gln Ala Tyr Glu Glu Arg Gln Arg His  
 355 360 365

Trp Gln Arg Glu Arg Glu Ala Leu Arg Glu Asp Cys Ala Ala Gln Ala  
 370 375 380

Gln Arg Ala Gln Arg Ala Gln Gln Leu Leu Gln Leu Gln Val Phe Gln  
 385 390 395 400



Leu Gln Gln Glu Lys Arg Gln Leu Gln Asp Asp Phe Ala Gln Leu Leu  
 405 410 415

Gln Glu Arg Glu Gln Leu Glu Arg Arg Cys Ala Thr Leu Glu Arg Glu  
 420 425 430

Arg Arg Arg Gly Glu Glu Gln Arg Asp Ser Phe Glu Gly Glu Arg Asp  
 435 440 445

His Cys Tyr  
 450

<210> 159  
 <211> 1193  
 <212> PRT  
 <213> Homo sapien

<400> 159

Met Glu Arg His Gln Pro Arg Leu His His Pro Ala Gln Gly Ser Ala  
 1 5 10 15

Ala Gly Thr Pro Tyr Pro Ser Ser Ala Ser Leu Arg Gly Cys Arg Glu  
 20 25 30

Ser Lys Met Pro Arg Arg Lys Gly Pro Gln His Pro Pro Pro Pro Ser  
 35 40 45

Gly Pro Glu Glu Pro Gly Glu Lys Arg Pro Lys Phe His Leu Asn Ile  
 50 55 60

Arg Thr Leu Thr Asp Asp Met Leu Asp Lys Phe Ala Ser Ile Arg Ile  
 65 70 75 80

Pro Gly Ser Lys Lys Glu Arg Pro Pro Leu Pro Asn Leu Lys Thr Ala  
 85 90 95

Phe Ala Ser Ser Asp Cys Ser Ala Ala Pro Leu Glu Met Met Glu Asn  
 100 105 110

Phe Pro Lys Pro Leu Ser Glu Asn Glu Leu Leu Glu Leu Phe Glu Lys  
 115 120 125

Met Met Glu Asp Met Asn Leu Asn Glu Asp Lys Lys Ala Pro Leu Arg  
 130 135 140

Glu Lys Asp Phe Ser Ile Lys Lys Glu Met Val Met Gln Tyr Ile Asn  
 145 150 155 160

Thr Ala Ser Lys Thr Gly Ser Leu Lys Arg Ser Arg Gln Ile Ser Pro  
165 170 175

Gln Glu Phe Ile His Glu Leu Lys Met Gly Ser Ala Asp Glu Arg Leu  
180 185 190

Val Thr Cys Leu Glu Ser Leu Arg Val Ser Leu Thr Ser Asn Pro Val  
195 200 205

Ser Trp Val Glu Ser Phe Gly His Glu Gly Leu Gly Leu Leu Leu Asp  
210 215 220

Ile Leu Glu Lys Leu Ile Ser Gly Lys Ile Gln Glu Lys Val Val Lys  
225 230 235 240

Lys Asn Gln His Lys Val Ile Gln Cys Leu Lys Ala Leu Met Asn Thr  
245 250 255

Gln Tyr Gly Leu Glu Arg Ile Met Ser Glu Glu Arg Ser Leu Ser Leu  
260 265 270

Leu Ala Lys Ala Val Asp Pro Arg His Pro Asn Met Met Thr Asp Val  
275 280 285

Val Lys Leu Leu Ser Ala Val Cys Ile Val Gly Glu Glu Ser Ile Leu  
290 295 300

Glu Glu Val Leu Glu Ala Leu Thr Ser Ala Gly Glu Glu Lys Lys Ile  
305 310 315 320

Asp Arg Phe Phe Cys Ile Val Glu Gly Leu Arg His Asn Ser Val Gln  
325 330 335

Leu Gln Val Ala Cys Met Gln Leu Ile Asn Ala Leu Val Thr Ser Pro  
340 345 350

Asp Asp Leu Asp Phe Arg Leu His Ile Arg Asn Glu Phe Met Arg Cys  
355 360 365

Gly Leu Lys Glu Ile Leu Pro Asn Leu Lys Cys Ile Lys Asn Asp Gly  
370 375 380

Leu Asp Ile Gln Leu Lys Val Phe Asp Glu His Lys Glu Glu Asp Leu  
385 390 395 400

Phe Glu Leu Ser His Arg Leu Glu Asp Ile Arg Ala Glu Leu Asp Glu  
 405 410 415

Ala Tyr Asp Val Tyr Asn Met Val Trp Ser Thr Val Lys Glu Thr Arg  
 420 425 430

Ala Glu Gly Tyr Phe Ile Ser Ile Leu Gln His Leu Leu Leu Ile Arg  
 435 440 445

Asn Asp Tyr Phe Ile Arg Gln Gln Tyr Phe Lys Leu Ile Asp Glu Cys  
 450 455 460

Val Ser Gln Ile Val Leu His Arg Asp Gly Met Asp Pro Asp Phe Thr  
 465 470 475 480

Tyr Arg Lys Arg Leu Asp Leu Asp Leu Thr Gln Phe Val Asp Ile Cys  
 485 490 495

Ile Asp Gln Ala Lys Leu Glu Glu Phe Glu Glu Lys Ala Ser Glu Leu  
 500 505 510

Tyr Lys Lys Phe Glu Lys Glu Phe Thr Asp His Gln Glu Thr Gln Ala  
 515 520 525

Glu Leu Gln Lys Lys Glu Ala Lys Ile Asn Glu Leu Gln Ala Glu Leu  
 530 535 540

Gln Ala Phe Lys Ser Gln Phe Gly Ala Leu Pro Ala Asp Cys Asn Ile  
 545 550 555 560

Pro Leu Pro Pro Ser Lys Glu Gly Gly Thr Gly His Ser Ala Leu Pro  
 565 570 575

Pro Pro Pro Pro Leu Pro Ser Gly Gly Gly Val Pro Pro Pro Pro Pro  
 580 585 590

Pro Pro Pro Pro Pro Pro Leu Pro Gly Met Arg Met Pro Phe Ser Gly  
 595 600 605

Pro Val Pro Pro Pro Pro Pro Leu Gly Phe Leu Gly Gly Gln Asn Ser  
 610 615 620

Pro Pro Leu Pro Ile Leu Pro Phe Gly Leu Lys Pro Lys Lys Glu Phe  
 625 630 635 640

Lys Pro Glu Ile Ser Met Arg Arg Leu Asn Trp Leu Lys Ile Arg Pro  
 645 650 655

His Glu Met Thr Glu Asn Cys Phe Trp Ile Lys Val Asn Glu Asn Lys  
 660 665 670

Tyr Glu Asn Val Asp Leu Leu Cys Lys Leu Glu Asn Thr Phe Cys Cys  
 675 680 685

Gln Gln Lys Glu Arg Arg Glu Glu Glu Asp Ile Glu Glu Lys Lys Ser  
 690 695 700

Ile Lys Lys Lys Ile Lys Glu Leu Lys Phe Leu Asp Ser Lys Ile Ala  
 705 710 715 720

Gln Asn Leu Ser Ile Phe Leu Ser Ser Phe Arg Val Pro Tyr Glu Glu  
 725 730 735

Ile Arg Met Met Ile Leu Glu Val Asp Glu Thr Arg Leu Ala Glu Ser  
 740 745 750

Met Ile Gln Asn Leu Ile Lys His Leu Pro Asp Gln Glu Gln Leu Asn  
 755 760 765

Ser Leu Ser Gln Phe Lys Ser Glu Tyr Ser Asn Leu Cys Glu Pro Glu  
 770 775 780

Gln Phe Val Val Val Met Ser Asn Val Lys Arg Leu Arg Pro Arg Leu  
 785 790 795 800

Ser Ala Ile Leu Phe Lys Leu Gln Phe Glu Glu Gln Val Asn Asn Ile  
 805 810 815

Lys Pro Asp Ile Met Ala Val Ser Thr Ala Cys Glu Glu Ile Lys Lys  
 820 825 830

Ser Lys Ser Phe Ser Lys Leu Leu Glu Leu Val Leu Leu Met Gly Asn  
 835 840 845

Tyr Met Asn Ala Gly Ser Arg Asn Ala Gln Thr Phe Gly Phe Asn Leu  
 850 855 860

Ser Ser Leu Cys Lys Leu Lys Asp Thr Lys Ser Ala Asp Gln Lys Thr  
 865 870 875 880

Thr Leu Leu His Phe Leu Val Glu Ile Cys Glu Glu Lys Tyr Pro Asp

885	890	895
Ile Leu Asn Phe Val Asp Asp Leu Glu Pro Leu Asp Lys Ala Ser Lys 900 905 910		
Val Ser Val Glu Thr Leu Glu Lys Asn Leu Arg Gln Met Gly Arg Gln 915 920 925		
Leu Gln Gln Leu Glu Lys Glu Leu Glu Thr Phe Pro Pro Pro Glu Asp 930 935 940		
Leu His Asp Lys Phe Val Thr Lys Met Ser Arg Phe Val Ile Ser Ala 945 950 955 960		
Lys Glu Gln Tyr Glu Thr Leu Ser Lys Leu His Glu Asn Met Glu Lys 965 970 975		
Leu Tyr Gln Ser Ile Ile Gly Tyr Tyr Ala Ile Asp Val Lys Lys Val 980 985 990		
Ser Val Glu Asp Phe Leu Thr Asp Leu Asn Asn Phe Arg Thr Thr Phe 995 1000 1005		
Met Gln Ala Ile Lys Glu Asn Ile Lys Lys Arg Glu Ala Glu Glu 1010 1015 1020		
Lys Glu Lys Arg Val Arg Ile Ala Lys Glu Leu Ala Glu Arg Glu 1025 1030 1035		
Arg Leu Glu Arg Gln Gln Lys Lys Lys Arg Leu Leu Glu Met Lys 1040 1045 1050		
Thr Glu Gly Asp Glu Thr Gly Val Met Asp Asn Leu Leu Glu Ala 1055 1060 1065		
Leu Gln Ser Gly Ala Ala Phe Arg Asp Arg Arg Lys Arg Thr Pro 1070 1075 1080		
Met Pro Lys Asp Val Arg Gln Ser Leu Ser Pro Met Ser Gln Arg 1085 1090 1095		
Pro Val Leu Lys Val Cys Asn His Glu Asn Gln Lys Val Gln Leu 1100 1105 1110		
Thr Glu Gly Ser Arg Ser His Tyr Asn Ile Asn Cys Asn Ser Thr 1115 1120 1125		

Arg Thr Pro Val Ala Lys Glu Leu Asn Tyr Asn Leu Asp Thr His  
 1130 1135 1140

Thr Ser Thr Gly Arg Ile Lys Ala Ala Glu Lys Lys Glu Ala Cys  
 1145 1150 1155

Asn Val Glu Ser Asn Arg Lys Lys Glu Thr Glu Leu Leu Gly Ser  
 1160 1165 1170

Phe Ser Lys Asn Glu Ser Val Pro Glu Val Glu Ala Leu Leu Ala  
 1175 1180 1185

Arg Leu Arg Ala Leu  
 1190

<210> 160  
 <211> 650  
 <212> PRT  
 <213> Homo sapien

<400> 160

Met Ser Leu Ala Asp Glu Leu Leu Ala Asp Leu Glu Glu Ala Ala Glu  
 1 5 10 15

Glu Glu Glu Gly Gly Ser Tyr Gly Glu Glu Glu Glu Glu Pro Ala Ile  
 20 25 30

Glu Asp Val Gln Glu Glu Thr Gln Leu Asp Leu Ser Gly Asp Ser Val  
 35 40 45

Lys Thr Ile Ala Lys Leu Trp Asp Ser Lys Met Phe Ala Glu Ile Met  
 50 55 60

Met Lys Ile Glu Glu Tyr Ile Ser Lys Gln Ala Lys Ala Ser Glu Val  
 65 70 75 80

Met Gly Pro Val Glu Ala Ala Pro Glu Tyr Arg Val Ile Val Asp Ala  
 85 90 95

Asn Asn Leu Thr Val Glu Ile Glu Asn Glu Leu Asn Ile Ile His Lys  
 100 105 110

Phe Ile Arg Asp Lys Tyr Ser Lys Arg Phe Pro Glu Leu Glu Ser Leu  
 115 120 125

Val Pro Asn Ala Leu Asp Tyr Ile Arg Thr Val Lys Glu Leu Gly Asn  
130 135 140

Ser Leu Asp Lys Cys Lys Asn Asn Glu Asn Leu Gln Gln Ile Leu Thr  
145 150 155 160

Asn Ala Thr Ile Met Val Val Ser Val Thr Ala Ser Thr Thr Gln Gly  
165 170 175

Gln Gln Leu Ser Glu Glu Glu Leu Glu Arg Leu Glu Glu Ala Cys Asp  
180 185 190

Met Ala Leu Glu Leu Asn Ala Ser Lys His Arg Ile Tyr Glu Tyr Val  
195 200 205

Glu Ser Arg Met Ser Phe Ile Ala Pro Asn Leu Ser Ile Ile Ile Gly  
210 215 220

Ala Ser Thr Ala Ala Lys Ile Met Gly Val Ala Gly Gly Leu Thr Asn  
225 230 235 240

Leu Ser Lys Met Pro Ala Cys Asn Ile Met Leu Leu Gly Ala Gln Arg  
245 250 255

Lys Thr Leu Ser Gly Phe Ser Ser Thr Ser Val Leu Pro His Thr Gly  
260 265 270

Tyr Ile Tyr His Ser Asp Ile Val Gln Ser Leu Pro Pro Asp Leu Arg  
275 280 285

Arg Lys Ala Ala Arg Leu Val Ala Ala Lys Cys Thr Leu Ala Ala Arg  
290 295 300

Val Asp Ser Phe His Glu Ser Thr Glu Gly Lys Val Gly Tyr Glu Leu  
305 310 315 320

Lys Asp Glu Ile Glu Arg Lys Phe Asp Lys Trp Gln Glu Pro Pro Pro  
325 330 335

Val Lys Gln Val Lys Pro Leu Pro Ala Pro Leu Asp Gly Gln Arg Lys  
340 345 350

Lys Arg Gly Gly Arg Ser Val Arg Gly Pro Gly Gly Pro Val Gly Met  
355 360 365

Gly Val Met Glu Gly Arg Ser Arg Arg Pro Pro Pro Ser Arg Leu Pro

370		375		380
Gly Ala Ala His Pro Pro Val Pro Val Pro Gln Asp Glu Gly Ala Ala				
385		390		400
Gly Ala Asp Gly Asp Pro Glu Ala Gly Gln Pro Tyr Glu Leu Arg Arg				
	405		410	415
Gly Gln Thr Pro Arg Ala Pro Ser Ser Thr Pro Gln Pro Ala Ser Arg				
	420		425	430
His Arg Pro Leu Pro Pro Ala Thr Ala Pro Pro Leu Val Leu Trp Pro				
	435		440	445
Trp Leu Met Ser Arg Ala Leu Pro Gln Pro Pro Pro Pro Arg Pro Leu				
	450		455	460
Phe Ser Phe Pro Ser Ile Gln Pro Gln Ser Asp Pro Arg Gly Pro Trp				
465		470		480
Ser Leu Cys Leu Arg Cys Leu Glu Pro Pro Arg Leu Pro Ile Ala Pro				
	485		490	495
Gly Ser Leu Ala Gly Ser Ser Leu Pro Arg Gly Ser Leu Val Pro Cys				
	500		505	510
Cys Thr Ala Ala Pro Ser Leu Gly Pro Ala Ser Leu Leu Cys Tyr Pro				
	515		520	525
Ser Val Ile Pro Leu Val Leu Gln Asp Arg Thr Gln Arg Pro Pro His				
	530		535	540
Pro Ile Lys Pro Val Leu Val Pro Asp Ile Pro Arg Pro Thr Arg Ile				
545		550		560
Glu Glu Asp Ala Tyr Gln Glu Asp Leu Gly Phe Ser Leu Gly His Leu				
	565		570	575
Gly Lys Ser Gly Ser Gly Arg Val Arg Gln Thr Gln Val Asn Glu Ala				
	580		585	590
Thr Lys Ala Arg Ile Ser Lys Thr Leu Gln Arg Thr Leu Gln Lys Gln				
	595		600	605
Ser Val Val Tyr Gly Gly Lys Ser Thr Ile Arg Asp Arg Ser Ser Gly				
	610		615	620



Thr Ala Ser Ser Val Ala Phe Thr Pro Leu Gln Gly Pro Gly Asp Cys  
 625 630 635 640

Glu Pro Thr Gly Gly Arg Glu Glu Gly Gly  
 645 650

<210> 161  
 <211> 369  
 <212> PRT  
 <213> Homo sapien

<400> 161

Lys Gln Trp Cys Ala Glu Arg Arg Gly Leu Gly Met Ser Leu Ala Asp  
 1 5 10 15

Glu Leu Leu Ala Asp Leu Glu Glu Ala Ala Glu Glu Glu Glu Gly Gly  
 20 25 30

Ser Tyr Gly Glu Glu Glu Glu Glu Pro Ala Ile Glu Asp Val Gln Glu  
 35 40 45

Glu Thr Gln Leu Asp Leu Ser Gly Asp Ser Val Lys Thr Ile Ala Lys  
 50 55 60

Leu Trp Asp Ser Lys Met Phe Ala Glu Ile Met Met Lys Ile Glu Glu  
 65 70 75 80

Tyr Ile Ser Lys Gln Ala Lys Ala Ser Glu Val Met Gly Pro Val Glu  
 85 90 95

Ala Ala Pro Glu Tyr Arg Val Ile Val Asp Ala Asn Asn Leu Thr Val  
 100 105 110

Glu Ile Glu Asn Glu Leu Asn Ile Ile His Lys Phe Ile Arg Asp Lys  
 115 120 125

Tyr Ser Lys Arg Phe Pro Glu Leu Glu Ser Leu Val Pro Asn Ala Leu  
 130 135 140

Asp Tyr Ile Arg Thr Val Lys Glu Leu Gly Asn Ser Leu Asp Lys Cys  
 145 150 155 160

Lys Asn Asn Glu Asn Leu Gln Gln Ile Leu Thr Asn Ala Thr Ile Met  
 165 170 175

Val Val Ser Val Thr Ala Ser Thr Thr Gln Gly Gln Gln Leu Ser Glu  
 180 185 190

Glu Glu Leu Glu Arg Leu Glu Glu Ala Cys Asp Met Ala Leu Glu Leu  
 195 200 205

Asn Ala Ser Lys His Arg Ile Tyr Glu Tyr Val Glu Ser Arg Met Ser  
 210 215 220

Phe Ile Ala Pro Asn Leu Ser Ile Ile Ile Gly Ala Ser Thr Ala Ala  
 225 230 235 240

Lys Ile Met Gly Val Ala Gly Gly Leu Thr Asn Leu Ser Lys Met Pro  
 245 250 255

Ala Cys Asn Ile Met Leu Leu Gly Ala Gln Arg Lys Thr Leu Ser Gly  
 260 265 270

Phe Ser Ser Thr Ser Val Leu Pro His Thr Gly Tyr Ile Tyr His Ser  
 275 280 285

Asp Ile Val Gln Ser Leu Pro Pro Asp Leu Arg Arg Lys Ala Ala Arg  
 290 295 300

Leu Val Ala Ala Lys Cys Thr Leu Ala Ala Arg Val Asp Ser Phe His  
 305 310 315 320

Glu Ser Thr Glu Gly Lys Val Gly Tyr Glu Leu Lys Asp Glu Ile Glu  
 325 330 335

Arg Lys Phe Asp Lys Trp Gln Glu Pro Pro Pro Val Lys Gln Val Lys  
 340 345 350

Pro Leu Pro Ala Pro Leu Asp Gly Gln Arg Lys Lys Arg Gly Gly Arg  
 355 360 365

Arg

<210> 162  
 <211> 164  
 <212> PRT  
 <213> Homo sapien

<400> 162

Arg Arg Pro Tyr Ala Gly Thr Arg Leu Pro Val Gly Ser Pro Gly Leu  
 1 5 10 15

Phe Leu Asn Ala Ala Ala Ala Thr Pro Arg Thr Pro Ser Val Thr Gly  
20 25 30

Ala Thr Glu Thr Val Thr Pro Ser Glu Ala Pro Val Leu Ala Ala Glu  
35 40 45

Pro Glu Ala Asp Lys Gly Thr Val Leu Ala Leu Thr Glu Asn Asn Phe  
50 55 60

Asp Asp Thr Ile Ala Glu Gly Ile Thr Phe Ile Lys Phe Tyr Ala Pro  
65 70 75 80

Trp Cys Gly His Cys Lys Thr Leu Ala Pro Thr Trp Glu Glu Leu Ser  
85 90 95

Lys Lys Glu Phe Pro Gly Leu Ala Gly Val Lys Ile Ala Glu Val Asp  
100 105 110

Cys Thr Ala Glu Arg Asn Ile Cys Ser Lys Tyr Ser Val Arg Gly Tyr  
115 120 125

Pro Thr Leu Leu Leu Phe Arg Gly Gly Lys Lys Val Ser Glu His Ser  
130 135 140

Gly Gly Arg Asp Leu Asp Ser Leu His Arg Phe Val Leu Ser Gln Ala  
145 150 155 160

Lys Asp Glu Leu

<210> 163  
<211> 31  
<212> PRT  
<213> Homo sapien

<400> 163

Thr Asp Gln His Ser Ile Glu Ser Thr Val Thr Leu Arg Ser Glu Glu  
1 5 10 15

Arg Gln Tyr Cys His Lys Ala Thr Phe Pro Glu Leu Val Gly Arg  
20 25 30

<210> 164  
<211> 110  
<212> PRT  
<213> Homo sapien

&lt;400&gt; 164

Pro Leu Cys Ile Gln His Ser Ser Pro Thr Ser His Thr Gln Gly Asp  
 1 5 10 15

Val Asp Thr Trp Pro Lys Val Thr Gly Gly Arg Asn Leu Arg Asn Lys  
 20 25 30

Thr Thr Tyr Thr Val Cys Leu Arg Gln Lys Ile Thr Ala Ala Ser Arg  
 35 40 45

Pro Ala Ser Ala Leu Lys Glu Ile Phe Ile Asn His Val Trp Phe Thr  
 50 55 60

Asp Asn Ser Phe Phe Lys Lys Thr Gln Pro Pro Arg Glu Ala Gln Leu  
 65 70 75 80

Ser Arg Val Leu Tyr Thr Gln Leu Gln Leu Cys Ile Thr Ser Leu Val  
 85 90 95

Phe Gln Glu Asn Gln Ser Gly Thr Ile Cys Leu Phe Thr Leu  
 100 105 110

&lt;210&gt; 165

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 165

Met Val Thr Leu Glu Phe Pro Tyr Glu Arg Arg Asp Val Lys Thr Lys  
 1 5 10 15

Asp Arg Cys Gln Trp Ala Ala Leu Ala Leu Val Cys Thr Ala Val Ala  
 20 25 30

Ala Val Asp Ala Ser Val Leu  
 35

&lt;210&gt; 166

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 166

Pro Leu Cys Ile Gln His Ser Ser Pro Thr Ser His Thr Gln Gly Asp  
 1 5 10 15

Val Asp Thr Trp Pro Lys Val Thr Gly Gly Arg Asn Leu Arg Asn Lys  
20 25 30

Thr Thr Tyr Thr Val Cys Leu Arg Gln Lys Ile Thr Ala Ala Ser Arg  
35 40 45

Pro Ala Ser Ala Leu Lys Glu Ile Phe Ile Asn His Val Trp Phe Thr  
50 55 60

Asp Asn Ser Phe Phe Lys Lys Thr Gln Pro Pro Arg Glu Ala Gln Leu  
65 70 75 80

Ser Arg Val Leu Tyr Thr Gln Leu Gln Leu Cys Ile Thr Ser Leu Val  
85 90 95

Phe Gln Glu Asn Gln Ser Gly Thr Ile Cys Leu Phe Thr Leu  
100 105 110

<210> 167

<211> 140

<212> PRT

<213> Homo sapien

<400> 167

Met Val Gly Arg Arg Ala Leu Ile Val Leu Ala His Ser Glu Arg Thr  
1 5 10 15

Ser Phe Asn Tyr Ala Met Lys Glu Ala Ala Ala Ala Ala Leu Lys Lys  
20 25 30

Lys Gly Trp Glu Val Val Glu Ser Asp Leu Tyr Ala Met Asn Phe Asn  
35 40 45

Pro Ile Ile Ser Arg Lys Asp Ile Thr Gly Lys Leu Lys Asp Pro Ala  
50 55 60

Asn Phe Gln Tyr Pro Ala Glu Ser Val Leu Ala Tyr Lys Glu Gly His  
65 70 75 80

Leu Ser Pro Asp Ile Val Ala Glu Gln Lys Lys Leu Glu Ala Ala Asp  
85 90 95

Leu Val Ile Phe Gln Val Trp Gly Asp Ile Gly Arg Gly Val Arg Asp  
100 105 110

Ile Cys Val Leu Ile Val Leu Asp Met Tyr Leu Ile Ser Tyr Glu Ile  
115 120 125

Leu Asn Ser Tyr Pro Leu Tyr Cys Ile Leu Cys Lys  
130 135 140

<210> 168  
<211> 73  
<212> PRT  
<213> Homo sapien

<400> 168

Phe Glu Ser Val Pro Cys Lys Gly Glu Tyr Glu Thr Cys Asn Ser Asp  
1 5 10 15

Asn Leu Asn His Ala Val Leu Ala Val Gly Tyr Gly Ile Gln Lys Gly  
20 25 30

Asn Lys His Trp Ile Ile Lys Asn Ser Trp Gly Glu Asn Trp Gly Asn  
35 40 45

Lys Gly Tyr Ile Leu Met Ala Arg Asn Lys Asn Asn Ala Cys Gly Ile  
50 55 60

Ala Asn Leu Ala Ser Phe Pro Lys Met  
65 70

<210> 169  
<211> 72  
<212> PRT  
<213> Homo sapien

<400> 169

Ser Ser Arg Tyr Pro Gln Gly Glu Tyr Glu Thr Cys Asn Ser Asp Asn  
1 5 10 15

Leu Asn His Ala Val Leu Ala Val Gly Tyr Gly Ile Gln Lys Gly Asn  
20 25 30

Lys His Trp Ile Ile Lys Asn Ser Trp Gly Glu Asn Trp Gly Asn Lys  
35 40 45

Gly Tyr Ile Leu Met Ala Arg Asn Lys Asn Asn Ala Cys Gly Ile Ala  
50 55 60

Asn Leu Ala Ser Phe Pro Lys Met  
65 70

<210> 170

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; Homo sapien .

&lt;400&gt; 170

Phe Val Ser Leu Cys Ser Gly Ser Ser Ser Cys Arg Ser Leu Leu Phe  
 1 5 10 15

Phe Phe Arg Phe Val Leu Ile Arg Trp Ser Phe Pro Leu Leu Ser Ser  
 20 25 30

Ser Phe Ser Ser Ser Leu Phe Val Val Leu Phe Arg Arg Cys Gly Leu  
 35 40 45

Val Arg Phe Ser Arg Ser Val Leu Ala Ser Val Leu Leu Ala Leu Leu  
 50 55 60

Leu Leu Ser Ser Cys Val Arg Phe Pro Val Ala Cys Leu Ser Phe Ser  
 65 70 75 80

Leu Leu Leu Val Ile Cys Phe Ser Leu Phe Leu Leu Phe Leu Ser Pro  
 85 90 95

Val Ser Pro Ser Phe Leu Val Ser Ser Ser Pro Phe Leu Leu Phe Ala  
 100 105 110

Cys Ala Cys Leu Ala Arg Ser Val Phe Phe Cys Leu Cys Phe Cys Arg  
 115 120 125

Val Arg Leu Ser Leu Val Phe Phe Gly Leu Leu Phe Leu Phe Ser Pro  
 130 135 140

Leu Arg Ser Leu Leu Phe Ser Val Leu Arg Ala Ser Val Pro Phe Val  
 145 150 155 160

Phe Phe Val Phe Phe Ala Ser Phe Arg Ser Leu Arg Ser Ser Ser Ser  
 165 170 175

Val Pro Leu Leu Ser Ser Phe Leu Pro Leu Ser Pro Phe Leu Leu Leu  
 180 185 190

Trp Leu Pro Ser Leu Ala Val Leu Pro Leu Arg Leu Pro Leu Leu Pro  
 195 200 205

Ser Val Val Ser Arg Cys Cys Ser Cys Val Leu Leu Cys Val Leu Val  
 210 215 220

Leu Phe Trp Phe Leu Val Gly Gly Cys Val Val Cys Ala Leu Cys Val  
 225 230 235 240

Leu Phe Val Val Phe Val Arg Ser Trp Cys Thr Ala Glu Lys Ser His  
 245 250 255

His Gln Arg Thr Ser Phe Asn Arg Leu Ile Val Gly Ala Ser Pro Glu  
 260 265 270

Gly Leu Arg Ala Gly Arg Ser Gly Gly Cys Ser Arg Leu Leu Phe Phe  
 275 280 285

Ala Pro Trp Ala Leu Ser Lys Arg Ser Arg Tyr Leu Ala Leu Glu Gly  
 290 295 300

Thr Leu Ala Pro Pro Phe Phe Phe Cys Met Ser Thr Phe Ala Phe Ile  
 305 310 315 320

Glu

<210> 171  
 <211> 320  
 <212> PRT  
 <213> Homo sapien

<400> 171

Arg Leu Ala Leu Phe Trp Phe Phe Leu Val Ser Val Val Ile Val Leu  
 1 5 10 15

Leu Pro Leu Arg Ser His Ser Leu Val Leu Ser Leu Ala Leu Phe Leu  
 20 25 30

Leu Phe Leu Leu Pro Leu Arg Gly Ser Leu Pro Ala Leu Trp Ser Cys  
 35 40 45

Ser Phe Leu Ser Val Cys Pro Gly Phe Arg Leu Val Gly Ser Ser Pro  
 50 55 60

Ser Val Phe Leu Arg Pro Val Ser Cys Cys Leu Ser Val Phe Leu Ala  
 65 70 75 80

Ser Ala Arg His Leu Phe Leu Leu Val Leu Ala Phe Ser Leu Ser Gly  
 85 90 95

Leu Ala Phe Phe Pro Cys Leu Leu Leu Pro Phe Ser Ser Leu Cys Val



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100	105	110
Cys Leu Ser Arg Ser Leu Cys Val Leu Leu Ser Leu Leu Ser Cys		
115	120	125
Pro Leu Val Ser Cys Leu Leu Arg Leu Ala Phe Ser Leu Leu Ser Ser		
130	135	140
Pro Phe Ala Ala Val Phe Cys Ser Pro Cys Leu Cys Pro Phe Cys Leu		
145	150	155
Leu Arg Leu Leu Arg Phe Leu Pro Phe Pro Pro Leu Leu Phe Leu Arg		
165	170	175
Ser Ser Pro Leu Val Val Pro Pro Ala Leu Pro Phe Arg Cys Cys Ser		
180	185	190
Gly Phe Pro Arg Trp Pro Ser Ser Leu Phe Ala Ser Leu Ser Phe Pro		
195	200	205
Leu Ser Phe Leu Val Val Val Leu Val Cys Cys Cys Val Cys Ser Cys		
210	215	220
Cys Ser Gly Ser Trp Leu Val Val Val Trp Cys Val Arg Cys Val Cys		
225	230	235
Cys Leu Leu Cys Leu Cys Ala Arg Gly Val Leu Leu Arg Ser His Thr		
245	250	255
Thr Ser Val Arg Arg Leu Thr Gly Tyr Arg Gly Arg Ile Pro Arg Gly		
260	265	270
Ser Pro Ser Arg Ala Val Arg Arg Leu Phe Pro Pro Ser Phe Phe Cys		
275	280	285
Ser Leu Gly Pro Val Gln Thr Val Pro Tyr Leu Ala Leu Glu Gly Thr		
290	295	300
Leu Ala Pro Pro Phe Phe Phe Cys Met Ser Thr Phe Ala Phe Ile Glu		
305	310	315
320		

&lt;210&gt; 172

&lt;211&gt; 320

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 172

Arg Leu Ala Leu Phe Trp Phe Phe Leu Val Ser Val Val Ile Val Leu  
 1 5 10 15

Leu Pro Leu Arg Ser His Ser Leu Val Leu Ser Leu Ala Leu Phe Leu  
 20 25 30

Leu Phe Leu Leu Pro Leu Arg Gly Ser Leu Pro Ala Leu Trp Ser Cys  
 35 40 45

Ser Phe Leu Ser Val Cys Pro Gly Phe Arg Leu Val Gly Ser Ser Pro  
 50 55 60

Ser Val Phe Leu Arg Pro Val Ser Cys Cys Leu Ser Val Phe Leu Ala  
 65 70 75 80

Ser Ala Arg His Leu Phe Leu Leu Val Leu Ala Phe Ser Leu Ser Gly  
 85 90 95

Leu Ala Phe Phe Pro Cys Leu Leu Leu Pro Phe Ser Ser Leu Cys Val  
 100 105 110

Cys Leu Ser Arg Ser Leu Cys Val Leu Leu Ser Leu Leu Ser Cys  
 115 120 125

Pro Leu Val Ser Cys Leu Leu Arg Leu Ala Phe Ser Leu Leu Ser Ser  
 130 135 140

Pro Phe Ala Ala Val Phe Cys Ser Pro Cys Leu Cys Pro Phe Cys Leu  
 145 150 155 160

Leu Arg Leu Leu Arg Phe Leu Pro Phe Pro Pro Leu Leu Phe Leu Arg  
 165 170 175

Ser Ser Pro Leu Val Val Pro Pro Ala Leu Pro Phe Arg Cys Cys Ser  
 180 185 190

Gly Phe Pro Arg Trp Pro Ser Ser Leu Phe Ala Ser Leu Ser Phe Pro  
 195 200 205

Leu Ser Phe Leu Val Val Val Leu Val Cys Cys Cys Val Cys Ser Cys  
 210 215 220

Cys Ser Gly Ser Trp Leu Val Val Val Trp Cys Val Arg Cys Val Cys  
 225 230 235 240

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Cys Leu Leu Cys Leu Cys Ala Arg Gly Val Leu Leu Arg Ser His Thr  
 245 250 255

Thr Ser Val Arg Arg Leu Thr Gly Tyr Arg Gly Arg Ile Pro Arg Gly  
 260 265 270

Ser Pro Ser Arg Ala Val Arg Arg Leu Phe Pro Pro Ser Phe Phe Cys  
 275 280 285

Ser Leu Gly Pro Val Gln Thr Val Pro Tyr Leu Ala Leu Glu Gly Thr  
 290 295 300

Leu Ala Pro Pro Phe Phe Phe Cys Met Ser Thr Phe Ala Phe Ile Glu  
 305 310 315 320

<210> 173  
 <211> 684  
 <212> PRT  
 <213> Homo sapien

<400> 173

Met Glu Glu Asn Leu Ile Ser Met Arg Glu Asp His Ser Phe His Val  
 1 5 10 15

Arg Tyr Arg Met Glu Ala Ser Cys Leu Glu Leu Ala Leu Glu Gly Glu  
 20 25 30

Arg Leu Cys Lys Ser Gly Asp Cys Arg Ala Gly Val Ser Phe Phe Glu  
 35 40 45

Ala Ala Val Gln Val Gly Thr Glu Asp Leu Lys Thr Leu Ser Ala Ile  
 50 55 60

Tyr Ser Gln Leu Gly Asn Ala Tyr Phe Tyr Leu His Asp Tyr Ala Lys  
 65 70 75 80

Ala Leu Glu Tyr His His His Asp Leu Thr Leu Ala Arg Thr Ile Gly  
 85 90 95

Asp Gln Leu Gly Glu Ala Lys Ala Ser Gly Asn Leu Gly Asn Thr Leu  
 100 105 110

Lys Val Leu Gly Asn Phe Asp Glu Ala Ile Val Cys Cys Gln Arg His  
 115 120 125

Leu Asp Ile Ser Arg Glu Leu Asn Asp Lys Val Gly Glu Ala Arg Ala  
 130 135 140

Leu Tyr Asn Leu Gly Asn Val Tyr His Ala Lys Gly Lys Ser Phe Gly  
145 150 155 160

Cys Pro Gly Pro Gln Asp Val Gly Glu Phe Pro Glu Glu Val Arg Asp  
165 170 175

Ala Leu Gln Ala Ala Val Asp Phe Tyr Glu Glu Asn Leu Ser Leu Val  
180 185 190

Thr Ala Leu Gly Asp Arg Ala Ala Gln Gly Arg Ala Phe Gly Asn Leu  
195 200 205

Gly Asn Thr His Tyr Leu Leu Gly Asn Phe Arg Asp Ala Val Ile Ala  
210 215 220

His Glu Gln Arg Leu Leu Ile Ala Lys Glu Phe Gly Asp Lys Ala Ala  
225 230 235 240

Glu Arg Arg Ala Tyr Ser Asn Leu Gly Asn Ala Tyr Ile Phe Leu Gly  
245 250 255

Glu Phe Glu Thr Ala Ser Glu Tyr Tyr Lys Lys Thr Leu Leu Leu Ala  
260 265 270

Arg Gln Leu Lys Asp Arg Ala Val Glu Ala Gln Ser Cys Tyr Ser Leu  
275 280 285

Gly Asn Thr Tyr Thr Leu Leu Gln Asp Tyr Glu Lys Ala Ile Asp Tyr  
290 295 300

His Leu Lys His Leu Ala Ile Ala Gln Glu Leu Asn Asp Arg Ile Gly  
305 310 315 320

Glu Gly Arg Ala Cys Trp Ser Leu Gly Asn Ala Tyr Thr Ala Leu Gly  
325 330 335

Asn His Asp Gln Ala Met His Phe Ala Glu Lys His Leu Glu Ile Ser  
340 345 350

Arg Glu Val Gly Asp Lys Ser Gly Glu Leu Thr Ala Arg Leu Asn Leu  
355 360 365

Ser Asp Leu Gln Met Val Leu Gly Leu Ser Tyr Ser Thr Asn Asn Ser  
370 375 380

Ile Met Ser Glu Asn Thr Glu Ile Asp Ser Ser Leu Asn Gly Val Arg  
 385 390 395 400

Pro Lys Leu Gly Arg Arg His Ser Met Glu Asn Met Glu Leu Met Lys  
 405 410 415

Leu Thr Pro Glu Lys Val Gln Asn Trp Asn Ser Glu Ile Leu Ala Lys  
 420 425 430

Gln Lys Pro Leu Ile Ala Lys Pro Ser Ala Lys Leu Leu Phe Val Asn  
 435 440 445

Arg Leu Lys Gly Lys Lys Tyr Lys Thr Asn Ser Ser Thr Lys Val Leu  
 450 455 460

Gln Asp Ala Ser Asn Ser Ile Asp His Arg Ile Pro Asn Ser Gln Arg  
 465 470 475 480

Lys Ile Ser Ala Asp Thr Ile Gly Asp Glu Gly Phe Phe Asp Leu Leu  
 485 490 495

Ser Arg Phe Gln Ser Asn Arg Met Asp Asp Gln Arg Cys Cys Leu Gln  
 500 505 510

Glu Lys Asn Cys His Thr Ala Ser Thr Thr Thr Ser Ser Thr Pro Pro  
 515 520 525

Lys Met Met Leu Lys Thr Ser Ser Val Pro Val Val Ser Pro Asn Thr  
 530 535 540

Asp Glu Phe Leu Asp Leu Leu Ala Ser Ser Gln Ser Arg Arg Leu Asp  
 545 550 555 560

Asp Gln Arg Ala Ser Phe Ser Asn Leu Pro Gly Leu Arg Leu Thr Gln  
 565 570 575

Asn Ser Gln Ser Val Leu Ser His Leu Met Thr Asn Asp Asn Lys Glu  
 580 585 590

Ala Asp Glu Asp Phe Phe Asp Ile Leu Val Lys Cys Gln Gly Ser Arg  
 595 600 605

Leu Asp Asp Gln Arg Cys Ala Pro Pro Pro Ala Thr Thr Lys Gly Pro  
 610 615 620

Thr Val Pro Asp Glu Asp Phe Phe Ser Leu Ile Leu Arg Ser Gln Gly  
625 630 635 640

Lys Arg Met Asp Glu Gln Arg Val Leu Leu Gln Arg Asp Gln Asn Arg  
645 650 655

Asp Thr Asp Phe Gly Leu Lys Asp Phe Leu Gln Asn Asn Ala Leu Leu  
660 665 670

Glu Phe Lys Asn Ser Gly Lys Lys Ser Ala Asp His  
675 680

<210> 174

<211> 499

<212> PRT

<213> Homo sapien

<400> 174

Met Ser Gly His Ser Pro Thr Arg Gly Ala Met Gln Val Ala Met Asn  
1 5 10 15

Gly Lys Ala Arg Lys Glu Ala Val Gln Thr Ala Ala Lys Glu Leu Leu  
20 25 30

Lys Phe Val Asn Arg Ser Pro Ser Pro Phe His Ala Val Ala Glu Cys  
35 40 45

Arg Asn Arg Leu Leu Gln Ala Gly Phe Ser Glu Leu Lys Glu Thr Glu  
50 55 60

Lys Trp Asn Ile Lys Pro Glu Ser Lys Tyr Phe Met Thr Arg Asn Ser  
65 70 75 80

Ser Thr Ile Ile Ala Phe Ala Val Gly Gly Gln Tyr Val Pro Gly Asn  
85 90 95

Gly Phe Ser Leu Ile Gly Ala His Thr Asp Ser Pro Cys Leu Arg Val  
100 105 110

Lys Arg Arg Ser Arg Arg Ser Gln Val Gly Phe Gln Gln Val Gly Val  
115 120 125

Glu Thr Tyr Gly Gly Gly Ile Trp Ser Thr Trp Phe Asp Arg Asp Leu  
130 135 140

Thr Leu Ala Gly Arg Val Ile Val Lys Cys Pro Thr Ser Gly Arg Leu  
145 150 155 160

Glu Gln Gln Leu Val His Val Glu Arg Pro Ile Leu Arg Ile Pro His  
165 170 175

Leu Ala Ile His Leu Gln Arg Asn Ile Asn Glu Asn Phe Gly Pro Asn  
180 185 190

Thr Glu Met His Leu Val Pro Ile Leu Ala Thr Ala Ile Gln Glu Glu  
195 200 205

Leu Glu Lys Gly Thr Pro Glu Pro Gly Pro Leu Asn Ala Val Asp Glu  
210 215 220

Arg His His Ser Val Leu Met Ser Leu Leu Cys Ala His Leu Gly Leu  
225 230 235 240

Ser Pro Lys Asp Ile Val Glu Met Glu Leu Cys Leu Ala Asp Thr Gln  
245 250 255

Pro Ala Val Leu Gly Gly Ala Tyr Asp Glu Phe Ile Phe Ala Pro Arg  
260 265 270

Leu Asp Asn Leu His Ser Cys Phe Cys Ala Leu Gln Ala Leu Ile Asp  
275 280 285

Ser Cys Ala Gly Pro Gly Ser Leu Ala Thr Glu Pro His Val Arg Met  
290 295 300

Val Thr Leu Tyr Asp Asn Glu Glu Val Gly Ser Glu Ser Ala Gln Gly  
305 310 315 320

Ala Gln Ser Leu Leu Thr Glu Leu Val Leu Arg Arg Ile Ser Ala Ser  
325 330 335

Cys Gln His Pro Thr Ala Phe Glu Glu Ala Ile Pro Lys Ser Phe Met  
340 345 350

Ile Ser Ala Asp Met Ala His Ala Val His Pro Asn Tyr Leu Asp Lys  
355 360 365

His Glu Glu Asn His Arg Pro Leu Phe His Lys Gly Pro Val Ile Lys  
370 375 380

Val Ala Lys Ala Pro Thr Cys Arg Pro Tyr Gly Leu Leu Gln Pro Phe  
385 390 395 400

Gly Asp Ala Ile Lys Thr Leu His Gln Arg Ala Leu Lys Pro Ala Asn  
 405 410 415

Leu Pro Ser Thr Phe Lys Ser Thr Ala Asp Leu Ala Phe Asn Ile Val  
 420 425 430

Leu Leu Leu Lys Pro Pro Ser Ile Ala Glu Pro Arg Val Asn Tyr Thr  
 435 440 445

Lys Val Tyr Leu Leu Arg Pro Leu Arg Ala Gly Thr His Pro Cys Gln  
 450 455 460

Gly Gly Thr Ala Ala Val Ala Gly Asp Ala Pro His Ser Ser Pro Ile  
 465 470 475 480

Leu Ser Ala Thr Arg Ala Ala Gln Lys His Lys Gln Gln Gly Ala Arg  
 485 490 495

Arg Arg Met

<210> 175  
 <211> 407  
 <212> PRT  
 <213> Homo sapien

<400> 175

Gly Ala Gly Gln Ala Ala Arg Trp Gly Arg Ala Glu Pro Gly Gly Gln  
 1 5 10 15

Met Ser Gly His Ser Pro Thr Arg Gly Ala Met Gln Val Ala Met Asn  
 20 25 30

Gly Lys Ala Arg Lys Glu Ala Val Gln Thr Ala Ala Lys Glu Leu Leu  
 35 40 45

Lys Phe Val Asn Arg Ser Pro Ser Pro Phe His Ala Val Ala Glu Cys  
 50 55 60

Arg Asn Arg Leu Leu Gln Ala Gly Phe Ser Glu Leu Lys Glu Thr Glu  
 65 70 75 80

Lys Trp Asn Ile Lys Pro Glu Ser Lys Tyr Phe Met Thr Arg Asn Ser  
 85 90 95

Ser Thr Ile Ile Ala Phe Ala Val Gly Gly Gln Tyr Val Pro Gly Asn



100	105	110
Gly Phe Ser Leu Ile Gly Ala His Thr Asp Ser Pro Cys Leu Arg Val		
115	120	125
Lys Arg Arg Ser Arg Arg Ser Gln Val Gly Phe Gln Gln Val Gly Val		
130	135	140
Glu Thr Tyr Gly Gly Gly Ile Trp Ser Thr Trp Phe Asp Arg Asp Leu		
145	150	155
Thr Leu Ala Gly Arg Val Ile Val Lys Cys Pro Thr Ser Gly Arg Leu		
165	170	175
Glu Gln Gln Leu Val His Val Glu Arg Pro Ile Leu Arg Ile Pro His		
180	185	190
Leu Ala Ile His Leu Gln Arg Asn Ile Asn Glu Asn Phe Gly Pro Asn		
195	200	205
Thr Glu Met His Leu Val Pro Ile Leu Ala Thr Ala Ile Gln Glu Glu		
210	215	220
Leu Glu Lys Gly Thr Pro Glu Pro Gly Pro Leu Asn Ala Val Asp Glu		
225	230	235
Arg His His Ser Val Leu Met Ser Leu Leu Cys Ala His Leu Gly Leu		
245	250	255
Ser Pro Lys Asp Ile Val Glu Met Glu Leu Cys Leu Ala Asp Thr Gln		
260	265	270
Pro Ala Val Leu Gly Gly Ala Tyr Asp Glu Phe Ile Phe Ala Pro Arg		
275	280	285
Leu Asp Asn Leu His Ser Cys Phe Cys Ala Leu Gln Ala Leu Ile Asp		
290	295	300
Ser Cys Ala Gly Pro Gly Ser Leu Ala Thr Glu Pro His Val Arg Met		
305	310	315
Val Thr Leu Tyr Asp Asn Glu Glu Val Gly Ser Glu Ser Ala Gln Gly		
325	330	335
Ala Gln Ser Leu Leu Thr Glu Leu Val Leu Arg Arg Ile Ser Ala Ser		
340	345	350

Cys Gln His Pro Thr Ala Phe Glu Glu Ala Ile Pro Lys Ser Phe Met  
 355 360 365

Ile Ser Ala Asp Met Ala His Ala Val His Pro Asn Tyr Leu Asp Lys  
 370 375 380

His Glu Glu Asn His Arg Pro Leu Phe His Lys Gly Pro Val Ile Lys  
 385 390 395 400

Val Ala Lys Ala Pro Thr Leu  
 405

<210> 176  
 <211> 31  
 <212> PRT  
 <213> Homo sapien

<400> 176

Met His Leu Ile Thr Asp Asp Glu Ala Pro Tyr Arg Thr Pro Pro Pro  
 1 5 10 15

Ser Asn Ala His Val Gln Arg Ser Ile Asn Ala Leu Ile Asp Tyr  
 20 25 30

<210> 177  
 <211> 69  
 <212> PRT  
 <213> Homo sapien

<400> 177

Gly Thr Ala Asn Cys Asn Pro Val Pro Ala Ser Val Asn Glu Val Ile  
 1 5 10 15

Phe Ile Phe Pro Ser Ile His Met Phe Ile Tyr Tyr Leu Tyr Gly Cys  
 20 25 30

Phe Pro Thr Lys Trp Gln Ser Trp Ala Val Ala Ile Asp Thr Ile Trp  
 35 40 45

Ala Ala Lys Pro Lys Ile Phe Ser Ile Trp Pro Phe Thr Glu Lys Val  
 50 55 60

Cys Leu Pro Leu Ser  
 65

<210> 178

<211> 89  
 <212> PRT  
 <213> Homo sapien

<400> 178

Thr Ser Thr Ala Gln Cys Ala Gly Ile Arg Leu Ser Ser Gly Ala Arg  
 1 5 10 15

Ala Gly Thr Val Asn Asn Asp Glu Gly Glu Trp Ser Gly Pro Pro Pro  
 20 25 30

Glu Cys Arg Gly Lys Ser Leu Thr Ser Lys Val Pro Pro Thr Val Gln  
 35 40 45

Lys Pro Thr Thr Val Asn Val Pro Thr Thr Glu Val Ser Pro Thr Ser  
 50 55 60

Gln Lys Thr Thr Thr Lys Thr Thr Thr Pro Asn Ala Gln Ala Thr Arg  
 65 70 75 80

Ser Thr Ser Ala Ala Thr Thr Leu Ser  
 85

<210> 179  
 <211> 86  
 <212> PRT  
 <213> Homo sapien

<400> 179

Tyr Gly Ala Val Cys Gly Ile Arg Phe Arg Ala Ala Pro Gly Ser Thr  
 1 5 10 15

Val Asn Asn Asp Glu Gly Glu Trp Ser Gly Pro Pro Pro Glu Cys Arg  
 20 25 30

Gly Lys Ser Leu Thr Ser Lys Val Pro Pro Thr Val Gln Lys Pro Thr  
 35 40 45

Thr Val Asn Val Pro Thr Thr Glu Val Ser Pro Thr Ser Gln Lys Thr  
 50 55 60

Thr Thr Lys Thr Thr Thr Pro Asn Ala Gln Ala Thr Arg Ser Thr Ser  
 65 70 75 80

Ala Ala Thr Thr Leu Ser  
 85

<210> 180  
 <211> 404  
 <212> PRT  
 <213> Homo sapien

<400> 180

Met Leu Lys Thr Ala Ser Ala Ala Leu Thr Trp Gly Leu Gly Pro Asp  
 1 5 10 15

Pro Ala Trp Ser His Pro Ala Gln Lys Thr Gly Pro Pro Val Pro Val  
 20 25 30

Thr His Cys Ser Tyr Gly Ala Arg Gly Phe Trp Cys Trp Gly Pro Pro  
 35 40 45

Cys Arg Trp Gly Arg Arg Arg Ser Arg Ser Cys Arg Glu Asp Gln Lys  
 50 55 60

Pro Val Met Asp Asp Gln Arg Asp Leu Ile Ser Asn Asn Glu Gln Leu  
 65 70 75 80

Pro Met Leu Gly Arg Arg Pro Gly Ala Pro Glu Ser Lys Cys Ser Arg  
 85 90 95

Gly Ala Leu Tyr Thr Gly Phe Ser Ile Leu Val Thr Leu Leu Leu Ala  
 100 105 110

Gly Gln Ala Thr Thr Ala Tyr Phe Leu Tyr Gln Gln Gln Gly Arg Leu  
 115 120 125

Asp Lys Leu Thr Val Thr Ser Gln Asn Leu Gln Leu Glu Asn Leu Arg  
 130 135 140

Met Lys Leu Pro Lys Pro Pro Lys Pro Val Ser Lys Met Arg Met Ala  
 145 150 155 160

Thr Pro Leu Leu Met Gln Ala Leu Pro Met Gly Ala Leu Pro Gln Gly  
 165 170 175

Pro Met Gln Asn Ala Thr Lys Tyr Gly Asn Met Thr Glu Asp His Val  
 180 185 190

Met His Leu Leu Gln Asn Ala Asp Pro Leu Lys Val Tyr Pro Pro Leu  
 195 200 205

Lys Gly Ser Phe Pro Glu Asn Leu Arg His Leu Lys Asn Thr Met Glu  
 210 215 220

Thr Ile Asp Trp Lys Val Phe Glu Ser Trp Met His His Trp Leu Leu  
225 230 235 240

Phe Glu Met Ser Arg His Ser Leu Glu Gln Lys Pro Thr Asp Ala Pro  
245 250 255

Pro Lys Val Leu Thr Lys Cys Gln Glu Glu Val Ser His Ile Pro Ala  
260 265 270

Val His Pro Gly Ser Phe Arg Pro Lys Cys Asp Glu Asn Gly Asn Tyr  
275 280 285

Leu Pro Leu Gln Cys Tyr Gly Ser Ile Gly Tyr Cys Trp Cys Val Phe  
290 295 300

Pro Asn Gly Thr Glu Val Pro Asn Thr Arg Ser Arg Gly His His Asn  
305 310 315 320

Cys Ser Gly Lys Gln Trp His Cys Ala Ser Val Arg Gly Pro Gly Arg  
325 330 335

Thr Arg Lys Val Glu Gly Gln Glu Val Pro Ser Glu Ala His Gly Thr  
340 345 350

Arg Thr Pro Arg Met Ala Ala Pro Gly Gly Ser Asp Val Val Met Arg  
355 360 365

Pro Ala Leu Tyr Pro Ser Thr His Leu Cys Ile Pro Ile Cys Pro Phe  
370 375 380

Ile Ile Ser Pro Leu Thr Cys Thr His Ile Cys Ser Leu Ile Arg Gln  
385 390 395 400

Ser Phe His Leu

<210> 181  
<211> 371  
<212> PRT  
<213> Homo sapien

<400> 181

Leu Thr Ala Val Met Val Pro Ala Ala Ser Gly Val Gly Asp Leu Arg  
1 5 10 15

Ala Val Gly Gly Arg Arg Ser Arg Ser Cys Arg Glu Asp Gln Lys Pro  
20 25 30

Val Met Asp Asp Gln Arg Asp Leu Ile Ser Asn Asn Glu Gln Leu Pro  
35 40 45

Met Leu Gly Arg Arg Pro Gly Ala Pro Glu Ser Lys Cys Ser Arg Gly  
50 55 60

Ala Leu Tyr Thr Gly Phe Ser Ile Leu Val Thr Leu Leu Leu Ala Gly  
65 70 75 80

Gln Ala Thr Thr Ala Tyr Phe Leu Tyr Gln Gln Gln Gly Arg Leu Asp  
85 90 95

Lys Leu Thr Val Thr Ser Gln Asn Leu Gln Leu Glu Asn Leu Arg Met  
100 105 110

Lys Leu Pro Lys Pro Pro Lys Pro Val Ser Lys Met Arg Met Ala Thr  
115 120 125

Pro Leu Leu Met Gln Ala Leu Pro Met Gly Ala Leu Pro Gln Gly Pro  
130 135 140

Met Gln Asn Ala Thr Lys Tyr Gly Asn Met Thr Glu Asp His Val Met  
145 150 155 160

His Leu Leu Gln Asn Ala Asp Pro Leu Lys Val Tyr Pro Pro Leu Lys  
165 170 175

Gly Ser Phe Pro Glu Asn Leu Arg His Leu Lys Asn Thr Met Glu Thr  
180 185 190

Ile Asp Trp Lys Val Phe Glu Ser Trp Met His His Trp Leu Leu Phe  
195 200 205

Glu Met Ser Arg His Ser Leu Glu Gln Lys Pro Thr Asp Ala Pro Pro  
210 215 220

Lys Val Leu Thr Lys Cys Gln Glu Glu Val Ser His Ile Pro Ala Val  
225 230 235 240

His Pro Gly Ser Phe Arg Pro Lys Cys Asp Glu Asn Gly Asn Tyr Leu  
245 250 255

Pro Leu Gln Cys Tyr Gly Ser Ile Gly Tyr Cys Trp Cys Val Phe Pro

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                260                265                270

Asn Gly Thr Glu Val Pro Asn Thr Arg Ser Arg Gly His His Asn Cys
  275                280                285

Ser Gly Lys Gln Trp His Cys Ala Ser Val Arg Gly Pro Gly Arg Thr
  290                295                300

Arg Lys Val Glu Gly Gln Glu Val Pro Ser Glu Ala His Gly Thr Arg
  305                310                315                320

Thr Pro Arg Met Ala Ala Pro Gly Gly Ser Asp Val Val Met Arg Pro
          325                330                335

Ala Leu Tyr Pro Ser Thr His Leu Cys Ile Pro Ile Cys Pro Phe Ile
          340                345                350

Ile Ser Pro Leu Thr Cys Thr His Ile Cys Ser Leu Ile Arg Gln Ser
          355                360                365

Phe His Leu
  370

<210> 182
<211> 102
<212> PRT
<213> Homo sapien

<400> 182

Ile Leu His Gly Pro Leu Gly Gln Gly Ser His Gly Gln Arg Leu His
 1                5                10                15

Gln Asn Ala Asp Pro Leu Lys Val Tyr Pro Pro Leu Lys Gly Ser Phe
          20                25                30

Pro Glu Asn Leu Arg His Leu Lys Asn Thr Met Glu Thr Ile Asp Trp
          35                40                45

Lys Val Phe Glu Ser Trp Met His His Trp Leu Leu Phe Glu Met Ser
  50                55                60

Arg His Ser Leu Glu Gln Lys Pro Thr Asp Ala Pro Pro Lys Glu Ser
  65                70                75                80

Leu Glu Leu Glu Asp Pro Ser Ser Gly Leu Gly Val Thr Lys Gln Asp
          85                90                95

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Leu Gly Pro Val Pro Met  
100

<210> 183  
<211> 102  
<212> PRT  
<213> Homo sapien

<400> 183

Glu Gln Gln Arg Arg Ser Ser Thr Ser Cys Gln Pro His Thr Ala Thr  
1 5 10 15

Ala Phe Leu Leu Pro Ser Ala Pro Ser Pro Ser Pro Ile Ser His Pro  
20 25 30

Val Pro His Pro Met Arg Pro Trp Cys Leu Ala Leu Ser Ser Pro Leu  
35 40 45

Asp Lys Thr Asn Gln Val Gly Thr Ala Asp Asn Asn Ala Ala Arg Pro  
50 55 60

Cys Cys Pro Ile Ser Ile Cys Gln Gln Gly Arg Glu Val Pro Gly Ser  
65 70 75 80

Gly Gln Lys Leu Asp Arg Ser Pro Phe Leu Thr Ser Gln Gln Pro Pro  
85 90 95

Thr Gln Gly Ser Lys Thr  
100

<210> 184  
<211> 273  
<212> PRT  
<213> Homo sapien

<400> 184

Met Glu Gly Val Leu Cys Pro Ala Gly Trp Trp Leu Arg Pro Gln Ala  
1 5 10 15

Cys Ala Gln Gly Arg Trp Gln His Ser Glu Ala Thr Ser Thr Ala Glu  
20 25 30

Leu Ala Val Glu Ile Val Tyr Val Val Pro Ser Val Ala Glu Ser Leu  
35 40 45

Pro Ala Pro His Trp Leu Ser Thr Gln Gly Phe Gln Asn Leu Glu Lys  
50 55 60



Gly Ala Val Phe Trp Ser Trp Ser Cys Gly Val Pro Cys Ala Ser Met  
 65 70 75 80  
 Gly Trp Val Cys Ala Gln Ala Ala Leu Pro Trp Lys Cys Gly Cys Gly  
 85 90 95  
 Tyr Gly Leu Gly Val Trp Asp Pro Arg Gln Pro Lys Trp Glu Gln Gly  
 100 105 110  
 Arg Pro Val Gly Lys Gly Gly Ser Gly Leu Val Gly Ser Ala Ala Pro  
 115 120 125  
 Arg Cys Pro Phe Ser Val Gln Arg Gly Ser Asp Glu Leu Phe Ser Thr  
 130 135 140  
 Cys Val Thr Asn Gly Pro Phe Ile Met Ser Ser Asn Ser Ala Ser Ala  
 145 150 155 160  
 Ala Asn Gly Asn Asp Ser Lys Lys Phe Lys Gly Asp Ser Arg Ser Ala  
 165 170 175  
 Gly Val Pro Ser Arg Val Ile His Ile Arg Lys Leu Pro Ile Asp Val  
 180 185 190  
 Thr Glu Gly Glu Val Ile Ser Leu Gly Leu Pro Phe Gly Lys Val Thr  
 195 200 205  
 Asn Leu Leu Met Leu Lys Gly Lys Asn Gln Ala Phe Ile Glu Met Asn  
 210 215 220  
 Thr Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr  
 225 230 235 240  
 Pro Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Leu Cys Ala Leu  
 245 250 255  
 Ser Thr Ala Pro Ala Ser Cys Pro Gly Gly Ser Pro Arg Ile Pro Phe  
 260 265 270  
 Pro

<210> 185  
 <211> 227  
 <212> PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 185

Glu Pro Pro Ser Pro Thr Leu Ala Glu Tyr Pro Gly Leu Pro Glu Phe  
 1 5 10 15

Gly Lys Arg Ser Ser Val Leu Val Val Glu Leu Trp Gly Ala Val Arg  
 20 25 30

Val His Gly Leu Gly Leu Arg Ser Gly Cys Pro Ala Val Glu Val Trp  
 35 40 45

Val Trp Val Trp Val Gly Gly Leu Gly Pro Gln Ala Ala Gln Val Gly  
 50 55 60

Ala Gly Pro Ala Gly Gly Glu Gly Arg Leu Trp Pro Gly Gly Lys Cys  
 65 70 75 80

Ser Ser Ala Leu Ser Leu Leu Leu Gln Arg Gly Ser Asp Glu Leu Phe  
 85 90 95

Ser Thr Cys Val Thr Asn Gly Pro Phe Ile Met Ser Ser Asn Ser Ala  
 100 105 110

Ser Ala Ala Asn Gly Asn Asp Ser Lys Lys Phe Lys Gly Asp Ser Arg  
 115 120 125

Ser Ala Gly Val Pro Ser Arg Val Ile His Ile Arg Lys Leu Pro Ile  
 130 135 140

Asp Val Thr Glu Gly Glu Val Ile Ser Leu Gly Leu Pro Phe Gly Lys  
 145 150 155 160

Val Thr Asn Leu Leu Met Leu Lys Gly Lys Asn Gln Ala Phe Ile Glu  
 165 170 175

Met Asn Thr Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser  
 180 185 190

Val Thr Pro Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Leu Cys  
 195 200 205

Ala Leu Ser Thr Ala Pro Ala Ser Cys Pro Gly Gly Ser Pro Arg Ile  
 210 215 220

Pro Phe Pro

225

<210> 186  
 <211> 452  
 <212> PRT  
 <213> Homo sapien

&lt;400&gt; 186

Met Lys Ala Trp Phe Phe Pro Phe Ser Ile Arg Arg Leu Val Thr Phe  
 1 5 10 15

Pro Lys Gly Ser Pro Arg Glu Met Thr Ser Pro Ser Val Thr Ser Met  
 20 25 30

Gly Leu Phe Arg Arg Leu His Ser Val Pro Arg Gly Ser Ala Leu Cys  
 35 40 45

Ala Met Asp Gly Ile Val Pro Asp Ile Ala Val Gly Thr Lys Arg Gly  
 50 55 60

Ser Asp Glu Leu Phe Ser Thr Cys Val Thr Asn Gly Pro Phe Ile Met  
 65 70 75 80

Ser Ser Asn Ser Ala Ser Ala Ala Asn Gly Asn Asp Ser Lys Lys Phe  
 85 90 95

Lys Gly Asp Ser Arg Ser Ala Gly Val Pro Ser Arg Val Ile His Ile  
 100 105 110

Arg Lys Leu Pro Ile Asp Val Thr Glu Gly Glu Val Ile Ser Leu Gly  
 115 120 125

Leu Pro Phe Gly Lys Val Thr Asn Leu Leu Met Leu Lys Gly Lys Asn  
 130 135 140

Gln Val Pro Glu Pro Arg Phe Ser Gly Val Leu Ile Thr Val Gln Ala  
 145 150 155 160

Gly Thr Arg Arg Ala Gln Arg Ser Leu Pro Pro Gln Gln Ala Phe Ile  
 165 170 175

Glu Met Asn Thr Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr  
 180 185 190

Ser Val Thr Pro Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser  
 195 200 205

Asn His Lys Glu Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala  
 210 215 220

Gln Ala Ala Leu Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala  
 225 230 235 240

Leu Ala Ala Ser Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly  
 245 250 255

Gln Ser Pro Val Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val  
 260 265 270

Thr Leu Asp Val Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu  
 275 280 285

Lys Ile Ile Thr Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln  
 290 295 300

Tyr Ala Asp Pro Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly  
 305 310 315 320

Gln Asn Ile Tyr Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys  
 325 330 335

Leu Thr Ser Leu Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr  
 340 345 350

Thr Arg Pro Asp Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln  
 355 360 365

Thr Met Ala Ala Ala Phe Ala Ser Pro Tyr Ala Gly Ala Gly Phe Pro  
 370 375 380

Pro Thr Phe Ala Ile Pro Gln Ala Ala Gly Tyr Ser Asn Ala Trp Ser  
 385 390 395 400

Trp Phe Pro Ser Asp Cys Met Pro Thr Pro Pro Ser Gln Ala Ala Pro  
 405 410 415

His Pro Arg Arg Gln Pro Gly Arg Thr Gly His Ser Ser Ala Arg Ser  
 420 425 430

Gly Ala Leu Pro Gly Arg Gly Asp Ala Thr Ser Thr Glu Gln Ala Trp  
 435 440 445

Pro Gly Gln Trp  
450

<210> 187  
<211> 304  
<212> PRT  
<213> Homo sapien

<400> 187

Ala Ala Phe Leu Arg Gly Ala His Thr Val Gln Ala Gly Thr Arg Arg  
1 5 10 15

Ala Gln Arg Ser Leu Pro Pro Gln Gln Ala Phe Ile Glu Met Asn Thr  
20 25 30

Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro  
35 40 45

Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu  
50 55 60

Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu  
65 70 75 80

Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser  
85 90 95

Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val  
100 105 110

Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val  
115 120 125

Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr  
130 135 140

Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro  
145 150 155 160

Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr  
165 170 175

Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu  
180 185 190

Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp  
195 200 205

Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala  
 210 215 220

Ala Phe Ala Ser Pro Tyr Ala Gly Ala Gly Phe Pro Pro Thr Phe Ala  
 225 230 235 240

Ile Pro Gln Ala Ala Gly Tyr Ser Asn Ala Trp Ser Trp Phe Pro Ser  
 245 250 255

Asp Cys Met Pro Thr Pro Pro Ser Gln Ala Ala Pro His Pro Arg Arg  
 260 265 270

Gln Pro Gly Arg Thr Gly His Ser Ser Ala Arg Ser Gly Ala Leu Pro  
 275 280 285

Gly Arg Gly Asp Ala Thr Ser Thr Glu Gln Ala Trp Pro Gly Gln Trp  
 290 295 300

<210> 188  
 <211> 606  
 <212> PRT  
 <213> Homo sapien

<400> 188

Met Lys Ala Trp Phe Phe Pro Phe Ser Ile Arg Arg Leu Val Thr Phe  
 1 5 10 15

Pro Lys Gly Ser Pro Arg Glu Met Thr Ser Pro Ser Val Thr Ser Met  
 20 25 30

Gly Leu Phe Arg Arg Leu His Ser Val Pro Arg Gly Ser Ala Leu Cys  
 35 40 45

Ala Met Asp Gly Ile Val Pro Asp Ile Ala Val Gly Thr Lys Arg Gly  
 50 55 60

Ser Asp Glu Leu Phe Ser Thr Cys Val Thr Asn Gly Pro Phe Ile Met  
 65 70 75 80

Ser Ser Asn Ser Ala Ser Ala Ala Asn Gly Asn Asp Ser Lys Lys Phe  
 85 90 95

Lys Gly Asp Ser Arg Ser Ala Gly Val Pro Ser Arg Val Ile His Ile  
 100 105 110

Arg Lys Leu Pro Ile Asp Val Thr Glu Gly Glu Val Ile Ser Leu Gly  
 115 120 125

Leu Pro Phe Gly Lys Val Thr Asn Leu Leu Met Leu Lys Gly Lys Asn  
 130 135 140

Gln Val Pro Glu Pro Arg Phe Ser Gly Val Leu Thr Pro Cys Arg Arg  
 145 150 155 160

Gly Arg Gly Gly Pro Ser Ala His Cys Leu Pro Asn Glu Ala Phe Ile  
 165 170 175

Glu Met Asn Thr Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr  
 180 185 190

Ser Val Thr Pro Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser  
 195 200 205

Asn His Lys Glu Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala  
 210 215 220

Gln Ala Ala Leu Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala  
 225 230 235 240

Leu Ala Ala Ser Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly  
 245 250 255

Gln Ser Pro Val Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val  
 260 265 270

Thr Leu Asp Val Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu  
 275 280 285

Lys Ile Ile Thr Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln  
 290 295 300

Tyr Ala Asp Pro Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly  
 305 310 315 320

Gln Asn Ile Tyr Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys  
 325 330 335

Leu Thr Ser Leu Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr  
 340 345 350

Thr Arg Pro Asp Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln

355	360	365
Thr Met Ala Ala Ala Phe Gly Tyr Arg Gly Cys Pro Thr Arg Arg Gln		
370	375	380
Cys Ala Glu Trp Ser Ile Arg Ala Ala Gln Ser Gly Ala Pro Ala Ala		
385	390	395 400
Arg Ala Arg Pro Cys Thr Arg Val Met His Leu Leu Leu Ser Ala Arg		
	405	410 415
Pro Ala Gln His Gly Pro Val Ser Pro Thr Ser Gly Pro Arg Pro Pro		
	420	425 430
Leu Glu Gln Arg Ile Cys Pro Arg Arg Leu Cys Arg Gly Arg Pro Pro		
	435	440 445
Ala Gly Leu Gly Pro Ile Pro Gln His Ser Ala Arg Ser Leu Val Glu		
	450	455 460
Val Val Gly Ala Met Ile Ser Val Ser Phe Ile Ser Arg Cys Thr Trp		
465	470	475 480
Tyr Asn Leu Ser Leu Ser Val Cys Arg Ser Trp Phe Pro Ser His Leu		
	485	490 495
Cys His Ser Ser Ser Cys Arg Val Phe Lys Arg Leu Val Leu Val Pro		
	500	505 510
Gln Arg Leu His Ala His Thr Thr Phe Pro Gly Ser Ser Ala Ser Thr		
	515	520 525
Ala Ala Ala Trp Ala Asp Trp Ala Leu Glu Cys Gln Val Arg Gly Pro		
	530	535 540
Ser Arg Glu Arg Gly Arg His Val His Arg Ala Gly Leu Ala Arg Ala		
545	550	555 560
Val Val Gly Gln Gly Cys Gly Gly Pro Arg Val Asp Gly Ala Ser Gln		
	565	570 575
Lys Pro Leu Ile Ala Gln Ser Leu Trp Ser Gly Ser Leu Gln Ala Pro		
	580	585 590
Pro Gly Glu Arg Glu Asp Arg Gln Trp Leu Glu Gly Cys Leu		
	595	600 605



<210> 189  
 <211> 227  
 <212> PRT  
 <213> Homo sapien

<400> 189

Ala Ala Phe Leu Arg Gly Ala His Thr Val Gln Ala Gly Thr Arg Arg  
 1 5 10 15

Ala Gln Arg Ser Leu Pro Pro Gln Gln Ala Phe Ile Glu Met Asn Thr  
 20 25 30

Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro  
 35 40 45

Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu  
 50 55 60

Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu  
 65 70 75 80

Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser  
 85 90 95

Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val  
 100 105 110

Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val  
 115 120 125

Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr  
 130 135 140

Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro  
 145 150 155 160

Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr  
 165 170 175

Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu  
 180 185 190

Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp  
 195 200 205

Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala  
 210 215 220

Ala Phe Gly  
 225

<210> 190  
 <211> 432  
 <212> PRT  
 <213> Homo sapien

<400> 190

Met Lys Ala Trp Phe Phe Pro Phe Ser Ile Arg Arg Leu Val Thr Phe  
 1 5 10 15

Pro Lys Gly Ser Pro Arg Glu Met Thr Ser Pro Ser Val Thr Ser Met  
 20 25 30

Gly Leu Phe Arg Arg Leu His Ser Val Pro Arg Gly Ser Ala Leu Cys  
 35 40 45

Ala Met Asp Gly Ile Val Pro Asp Ile Ala Val Gly Thr Lys Arg Gly  
 50 55 60

Ser Asp Glu Leu Phe Ser Thr Cys Val Thr Asn Gly Pro Phe Ile Met  
 65 70 75 80

Ser Ser Asn Ser Ala Ser Ala Ala Asn Gly Asn Asp Ser Lys Lys Phe  
 85 90 95

Lys Gly Asp Ser Arg Ser Ala Gly Val Pro Ser Arg Val Ile His Ile  
 100 105 110

Arg Lys Leu Pro Ile Asp Val Thr Glu Gly Glu Val Ile Ser Leu Gly  
 115 120 125

Leu Pro Phe Gly Lys Val Thr Asn Leu Leu Met Leu Lys Gly Lys Asn  
 130 135 140

Gln Val Pro Glu Pro Arg Phe Ser Gly Val Leu Ile Thr Val Gln Ala  
 145 150 155 160

Gly Thr Arg Arg Ala Gln Arg Ser Leu Pro Pro Gln Gln Ala Phe Ile  
 165 170 175

Glu Met Asn Thr Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr  
 180 185 190

Ser Val Thr Pro Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser  
 195 200 205

Asn His Lys Glu Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala  
 210 215 220

Gln Ala Ala Leu Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala  
 225 230 235 240

Leu Ala Ala Ser Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly  
 245 250 255

Gln Ser Pro Val Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val  
 260 265 270

Thr Leu Asp Val Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu  
 275 280 285

Lys Ile Ile Thr Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln  
 290 295 300

Tyr Ala Asp Pro Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly  
 305 310 315 320

Gln Asn Ile Tyr Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys  
 325 330 335

Leu Thr Ser Leu Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr  
 340 345 350

Thr Arg Pro Asp Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln  
 355 360 365

Thr Met Ala Ala Ala Phe Gly Leu Ser Val Pro Asn Val His Gly Ala  
 370 375 380

Leu Ala Pro Leu Ala Ile Pro Ser Ala Ala Ala Ala Ala Ala Ala  
 385 390 395 400

Gly Arg Ile Ala Ile Pro Gly Leu Ala Gly Ala Gly Asn Ser Val Leu  
 405 410 415

Leu Val Ser Asn Leu Asn Pro Glu Ala Ser Thr Val Thr Cys Ser Ala  
 420 425 430

<210> 191  
<211> 284  
<212> PRT  
<213> Homo sapien

<400> 191

Ala Ala Phe Leu Arg Gly Ala His Thr Val Gln Ala Gly Thr Arg Arg  
1 5 10 15

Ala Gln Arg Ser Leu Pro Pro Gln Gln Ala Phe Ile Glu Met Asn Thr  
20 25 30

Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro  
35 40 45

Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu  
50 55 60

Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu  
65 70 75 80

Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser  
85 90 95

Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val  
100 105 110

Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val  
115 120 125

Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr  
130 135 140

Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro  
145 150 155 160

Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr  
165 170 175

Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu  
180 185 190

Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp  
195 200 205

Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala

210                                      215                                      220  
 Ala Phe Gly Leu Ser Val Pro Asn Val His Gly Ala Leu Ala Pro Leu  
 225                                      230                                      235                                      240  
 Ala Ile Pro Ser Ala Ala Ala Ala Ala Ala Ala Gly Arg Ile Ala  
 245                                      250                                      255  
 Ile Pro Gly Leu Ala Gly Ala Gly Asn Ser Val Leu Leu Val Ser Asn  
 260                                      265                                      270  
 Leu Asn Pro Glu Ala Ser Thr Val Thr Cys Ser Ala  
 275                                      280  
 <210> 192  
 <211> 304  
 <212> PRT  
 <213> Homo sapien  
 <400> 192  
 Ala Ala Phe Leu Arg Gly Ala His Thr Val Gln Ala Gly Thr Arg Arg  
 1                                      5                                      10                                      15  
 Ala Gln Arg Ser Leu Pro Pro Gln Gln Ala Phe Ile Glu Met Asn Thr  
 20                                      25                                      30  
 Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro  
 35                                      40                                      45  
 Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu  
 50                                      55                                      60  
 Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu  
 65                                      70                                      75                                      80  
 Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser  
 85                                      90                                      95  
 Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val  
 100                                      105                                      110  
 Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val  
 115                                      120                                      125  
 Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr  
 130                                      135                                      140

Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro  
 145 150 155 160

Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr  
 165 170 175

Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu  
 180 185 190

Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp  
 195 200 205

Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala  
 210 215 220

Ala Phe Ala Ser Pro Tyr Ala Gly Ala Gly Phe Pro Pro Thr Phe Ala  
 225 230 235 240

Ile Pro Gln Ala Ala Gly Tyr Ser Asn Ala Trp Ser Trp Phe Pro Ser  
 245 250 255

Asp Cys Met Pro Thr Pro Pro Ser Gln Ala Ala Pro His Pro Arg Arg  
 260 265 270

Gln Pro Gly Arg Thr Gly His Ser Ser Ala Arg Ser Gly Ala Leu Pro  
 275 280 285

Gly Arg Gly Asp Ala Thr Ser Thr Glu Gln Ala Trp Pro Gly Gln Trp  
 290 295 300

<210> 193  
 <211> 304  
 <212> PRT  
 <213> Homo sapien

<400> 193

Ala Ala Phe Leu Arg Gly Ala His Thr Val Gln Ala Gly Thr Arg Arg  
 1 5 10 15

Ala Gln Arg Ser Leu Pro Pro Gln Gln Ala Phe Ile Glu Met Asn Thr  
 20 25 30

Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro  
 35 40 45

Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu

50		55		60
Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu				
65		70		75
				80
Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser				
		85		90
				95
Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val				
		100		105
				110
Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val				
		115		120
				125
Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr				
		130		135
				140
Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro				
		145		150
				155
				160
Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr				
		165		170
				175
Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu				
		180		185
				190
Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp				
		195		200
				205
Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala				
		210		215
				220
Ala Phe Ala Ser Pro Tyr Ala Gly Ala Gly Phe Pro Pro Thr Phe Ala				
		225		230
				235
				240
Ile Pro Gln Ala Ala Gly Tyr Ser Asn Ala Trp Ser Trp Phe Pro Ser				
		245		250
				255
Asp Cys Met Pro Thr Pro Pro Ser Gln Ala Ala Pro His Pro Arg Arg				
		260		265
				270
Gln Pro Gly Arg Thr Gly His Ser Ser Ala Arg Ser Gly Ala Leu Pro				
		275		280
				285
Gly Arg Gly Asp Ala Thr Ser Thr Glu Gln Ala Trp Pro Gly Gln Trp				
		290		295
				300

<210> 194  
 <211> 304  
 <212> PRT  
 <213> Homo sapien

<400> 194

Ala Ala Phe Leu Arg Gly Ala His Thr Val Gln Ala Gly Thr Arg Arg  
 1 5 10 15

Ala Gln Arg Ser Leu Pro Pro Gln Gln Ala Phe Ile Glu Met Asn Thr  
 20 25 30

Glu Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro  
 35 40 45

Val Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu  
 50 55 60

Leu Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu  
 65 70 75 80

Gln Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser  
 85 90 95

Ala Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val  
 100 105 110

Leu Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val  
 115 120 125

Leu His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr  
 130 135 140

Phe Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro  
 145 150 155 160

Val Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr  
 165 170 175

Asn Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu  
 180 185 190

Asn Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp  
 195 200 205



Leu Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala  
210 215 220

Ala Phe Ala Ser Pro Tyr Ala Gly Ala Gly Phe Pro Pro Thr Phe Ala  
225 230 235 240

Ile Pro Gln Ala Ala Gly Tyr Ser Asn Ala Trp Ser Trp Phe Pro Ser  
245 250 255

Asp Cys Met Pro Thr Pro Pro Ser Gln Ala Ala Pro His Pro Arg Arg  
260 265 270

Gln Pro Gly Arg Thr Gly His Ser Ser Ala Arg Ser Gly Ala Leu Pro  
275 280 285

Gly Arg Gly Asp Ala Thr Ser Thr Glu Gln Ala Trp Pro Gly Gln Trp  
290 295 300

<210> 195  
<211> 315  
<212> PRT  
<213> Homo sapien

<400> 195

Met Arg Ser Val Gln Ala Gly Leu Ser Ser Gln Glu Ser Leu Ser Pro  
1 5 10 15

Val Leu Ser Leu Ser Pro Asp Ser Met Ser Phe Thr Thr Arg Ser Thr  
20 25 30

Phe Ser Thr Asn Tyr Arg Ser Leu Gly Ser Val Gln Ala Pro Ser Tyr  
35 40 45

Gly Ala Arg Pro Val Ser Ser Ala Ala Ser Val Tyr Ala Gly Ala Gly  
50 55 60

Gly Ser Gly Ser Arg Ile Ser Val Ser Arg Ser Thr Ser Phe Arg Gly  
65 70 75 80

Gly Met Gly Ser Gly Gly Leu Ala Thr Gly Ile Ala Gly Gly Leu Ala  
85 90 95

Gly Met Gly Gly Ile Gln Asn Glu Lys Glu Thr Met Gln Ser Leu Asn  
100 105 110

Asp Arg Leu Ala Ser Tyr Leu Asp Arg Val Arg Ser Leu Glu Thr Glu  
115 120 125

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Asn Arg Arg Leu Glu Ser Lys Ile Arg Glu His Leu Glu Lys Lys Gly
 130                               135                     140

Pro Gln Val Arg Asp Trp Ser His Tyr Phe Lys Ile Ile Glu Asp Leu
145                               150                     155                     160

Arg Ala Gln Ile Phe Ala Asn Thr Val Asp Asn Ala Arg Ile Val Leu
                               165                     170                     175

Gln Ile Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Val Lys Tyr
                               180                     185                     190

Glu Thr Glu Leu Ala Met Arg Gln Ser Val Glu Asn Asp Ile His Gly
                               195                     200                     205

Leu Arg Lys Val Ile Asp Asp Thr Asn Ile Thr Arg Leu Gln Leu Glu
 210                               215                     220

Thr Glu Ile Glu Ala Leu Lys Glu Glu Leu Leu Phe Met Lys Lys Asn
225                               230                     235                     240

His Glu Glu Asp Arg Thr Ala Ala Thr Ser Pro Asp Ala Ser Ser Gly
                               245                     250                     255

Leu Pro Arg Arg Gln Asn Ala Pro Asn Thr Gly Thr Gly Arg Pro Gly
                               260                     265                     270

Asp Ser Ala Arg Asp Glu Trp Ser Arg Pro Arg Gly Glu Gly Arg Gln
 275                               280                     285

Asn Gly Glu Pro Arg Pro Lys Arg Ser Val Asn Glu Pro Val Glu Arg
 290                               295                     300

Pro Gly Ser Asp Asp Ser Gly His Gly Gly Thr
305                               310                     315

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&lt;210&gt; 196

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;220&gt;

&lt;221&gt; MISC\_FEATURE

&lt;222&gt; (245)..(245)

&lt;223&gt; X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (250)..(251)  
<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (253)..(254)  
<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (257)..(258)  
<223> X=any amino acid

<400> 196

His Arg Ser Val Gln Ala Gly Leu Ser Ser Gln Glu Ser Leu Ser Pro  
1 5 10 15

Val Leu Ser Leu Ser Pro Asp Ser Met Ser Phe Thr Thr Arg Ser Thr  
20 25 30

Phe Ser Thr Asn Tyr Arg Ser Leu Gly Ser Val Gln Ala Pro Ser Tyr  
35 40 45

Gly Ala Arg Pro Val Ser Ser Ala Ala Ser Val Tyr Ala Gly Ala Gly  
50 55 60

Gly Ser Gly Ser Arg Ile Ser Val Ser Arg Ser Thr Ser Phe Arg Gly  
65 70 75 80

Gly Met Gly Ser Gly Gly Leu Ala Thr Gly Ile Ala Gly Gly Leu Ala  
85 90 95

Gly Met Gly Gly Ile Gln Asn Glu Lys Glu Thr Met Gln Ser Leu Asn  
100 105 110

Asp Arg Leu Ala Ser Tyr Leu Asp Arg Val Arg Ser Leu Glu Thr Glu  
115 120 125

Asn Arg Arg Leu Glu Ser Lys Ile Arg Glu His Leu Glu Lys Lys Gly  
130 135 140

Pro Gln Val Arg Asp Trp Ser His Tyr Phe Lys Ile Ile Glu Asp Leu  
145 150 155 160

Arg Ala Gln Ile Phe Ala Asn Thr Val Asp Asn Ala Arg Ile Val Leu

	165	170	175
Gln Ile Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Val Lys Tyr	180	185	190
Glu Thr Glu Leu Ala Met Arg Gln Ser Val Glu Asn Asp Ile His Gly	195	200	205
Leu Arg Lys Val Ile Asp Asp Thr Asn Ile Thr Arg Leu Gln Leu Glu	210	215	220
Thr Glu Ile Glu Ala Leu Lys Glu Glu Leu Leu Phe Met Lys Lys Asn	225	230	235
His Glu Glu Asp Xaa Thr Gly Leu Gln Xaa Xaa Met Xaa Xaa Leu Gly	245	250	255
Xaa Xaa Glu Glu Met Pro Pro Thr Pro Gly Leu Ala Asp Gln Ala Thr	260	265	270
Arg Gln Glu Thr Ser Gly Arg Asp Arg Gly Glu Lys Val Ala Arg Met	275	280	285
Gly Ser His Gly Pro Ser Gly Val	290	295	
<210>	197		
<211>	267		
<212>	PRT		
<213>	Homo sapien		
<400>	197		
Met Ser Phe Thr Thr Arg Ser Thr Phe Ser Thr Asn Tyr Arg Ser Leu	1	5	10
Gly Ser Val Gln Ala Pro Ser Tyr Gly Ala Arg Pro Val Ser Ser Ala	20	25	30
Ala Ser Val Tyr Ala Gly Ala Gly Gly Ser Gly Ser Arg Ile Ser Val	35	40	45
Ser Arg Ser Thr Ser Phe Arg Gly Gly Met Gly Ser Gly Gly Leu Ala	50	55	60
Thr Gly Ile Ala Gly Gly Leu Ala Gly Met Gly Gly Ile Gln Asn Glu	65	70	75
			80

Lys Glu Thr Met Gln Ser Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp  
85 90 95

Arg Val Arg Ser Leu Glu Thr Glu Asn Arg Arg Leu Glu Ser Lys Ile  
100 105 110

Arg Glu His Leu Glu Lys Lys Gly Pro Gln Val Arg Asp Trp Ser His  
115 120 125

Tyr Phe Lys Ile Ile Glu Asp Leu Arg Ala Gln Ile Phe Ala Asn Thr  
130 135 140

Val Asp Asn Ala Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu Ala  
145 150 155 160

Ala Asp Asp Phe Arg Val Lys Tyr Glu Thr Glu Leu Ala Met Arg Gln  
165 170 175

Ser Val Glu Asn Asp Ile His Gly Leu Arg Lys Val Ile Asp Asp Thr  
180 185 190

Asn Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu  
195 200 205

Glu Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu  
210 215 220

Gln Ala Gln Ile Ala Ser Ser Gly Val Asp Arg Gly Gly Arg Cys Pro  
225 230 235 240

Gln Ile Ser Gly Pro Arg Gln Asp His Gly Arg His Ser Gly Pro Asn  
245 250 255

Met Thr Ser Trp Leu Gly Arg Thr Glu Arg Ser  
260 265

<210> 198  
<211> 454  
<212> PRT  
<213> Homo sapien

<400> 198

Lys Ala Ala Ser Arg Ala Asn Asn Thr Cys Cys Pro Cys Pro Cys Pro  
1 5 10 15

Val Gly His Pro Val Ser Gly Gly Met Ser Phe Thr Thr Arg Ser Thr

20										25					30				
Phe	Ser	Thr	Asn	Tyr	Arg	Ser	Leu	Gly	Ser	Val	Gln	Ala	Pro	Ser	Tyr				
			35				40					45							
Gly	Ala	Arg	Pro	Val	Ser	Ser	Ala	Ala	Ser	Val	Tyr	Ala	Gly	Ala	Gly				
	50					55					60								
Gly	Ser	Gly	Ser	Arg	Ile	Ser	Val	Ser	Arg	Ser	Thr	Ser	Phe	Arg	Gly				
65					70					75					80				
Gly	Met	Gly	Ser	Gly	Gly	Leu	Ala	Thr	Gly	Ile	Ala	Gly	Gly	Leu	Ala				
				85					90					95					
Gly	Met	Gly	Gly	Ile	Gln	Asn	Glu	Lys	Glu	Thr	Met	Gln	Ser	Leu	Asn				
			100					105					110						
Asp	Arg	Leu	Ala	Ser	Tyr	Leu	Asp	Arg	Val	Arg	Ser	Leu	Glu	Thr	Glu				
		115					120					125							
Asn	Arg	Arg	Leu	Glu	Ser	Lys	Ile	Arg	Glu	His	Leu	Glu	Lys	Lys	Gly				
	130					135					140								
Pro	Gln	Val	Arg	Asp	Trp	Ser	His	Tyr	Phe	Lys	Ile	Ile	Glu	Asp	Leu				
145					150					155					160				
Arg	Ala	Gln	Ile	Phe	Ala	Asn	Thr	Val	Asp	Asn	Ala	Arg	Ile	Val	Leu				
				165					170					175					
Gln	Ile	Asp	Asn	Ala	Arg	Leu	Ala	Ala	Asp	Asp	Phe	Arg	Val	Lys	Tyr				
			180					185					190						
Glu	Thr	Glu	Leu	Ala	Met	Arg	Gln	Ser	Val	Glu	Asn	Asp	Ile	His	Gly				
		195					200					205							
Leu	Arg	Lys	Val	Ile	Asp	Asp	Thr	Asn	Ile	Thr	Arg	Leu	Gln	Leu	Glu				
	210					215					220								
Thr	Glu	Ile	Glu	Ala	Leu	Lys	Glu	Glu	Leu	Leu	Phe	Met	Lys	Lys	Asn				
225					230					235					240				
His	Glu	Glu	Glu	Val	Lys	Gly	Leu	Gln	Ala	Gln	Ile	Ala	Ser	Ser	Gly				
				245					250					255					
Leu	Thr	Val	Glu	Val	Asp	Ala	Pro	Lys	Ser	Gln	Asp	Leu	Ala	Lys	Ile				
			260					265						270					

Met Ala Asp Ile Arg Ala Gln Tyr Asp Glu Leu Ala Arg Lys Asn Arg  
 275 280 285

Glu Glu Leu Asp Lys Tyr Trp Ser Gln Gln Ile Glu Glu Ser Thr Thr  
 290 295 300

Val Val Thr Thr Gln Ser Ala Glu Val Gly Ala Ala Glu Thr Thr Leu  
 305 310 315 320

Thr Glu Leu Arg Arg Thr Val Gln Ser Leu Glu Ile Asp Leu Asp Ser  
 325 330 335

Met Arg Asn Leu Lys Ala Ser Leu Glu Asn Ser Leu Arg Glu Val Glu  
 340 345 350

Ala Arg Tyr Ala Leu Gln Met Glu Gln Leu Asn Gly Ile Leu Leu His  
 355 360 365

Leu Glu Ser Glu Leu Ala Gln Thr Arg Ala Glu Gly Gln Arg Gln Ala  
 370 375 380

Gln Glu Tyr Glu Ala Leu Leu Asn Ile Lys Val Lys Leu Glu Ala Glu  
 385 390 395 400

Ile Ala Thr Tyr Arg Arg Leu Leu Glu Asp Gly Glu Asp Phe Asn Leu  
 405 410 415

Gly Asp Ala Leu Asp Ser Ser Asn Ser Met Gln Thr Ile Gln Lys Thr  
 420 425 430

Thr Thr Arg Arg Ile Val Asp Gly Lys Val Val Ser Glu Thr Asn Asp  
 435 440 445

Thr Lys Val Leu Arg His  
 450

<210> 199  
 <211> 104  
 <212> PRT  
 <213> Homo sapien

<400> 199

Met Leu Glu Thr Lys Trp Ser Leu Leu Gln Gln Gln Lys Thr Ala Arg  
 1 5 10 15

Ser Asn Met Asp Asn Met Phe Glu Ser Tyr Ile Asn Asn Leu Arg Arg  
20 25 30

Gln Leu Glu Thr Leu Gly Gln Glu Lys Leu Lys Leu Glu Ala Glu Leu  
35 40 45

Gly Asn Met Gln Gly Leu Val Glu Asp Phe Lys Asn Lys Ser Glu Gln  
50 55 60

Leu Pro Pro Ser Thr Gln Leu Lys Ser Pro Cys Ser Pro Pro Pro Leu  
65 70 75 80

Gly Thr Leu Gly Leu Ser Pro His Gly Pro Leu Leu Trp Ala Val Gln  
85 90 95

Ser Tyr Leu Ile Arg Val Thr Thr  
100

<210> 200  
<211> 768  
<212> PRT  
<213> Homo sapien

<400> 200

Met Gly Gly Ala Glu Arg Gly Arg Ala Pro Ala Phe Leu Leu Arg Ser  
1 5 10 15

Ala Pro Val Ser Ala Gly Gly Gly Gly Ala Tyr Ile Thr Cys Ala Ala  
20 25 30

Pro Leu Leu Arg Glu Asp Val Ala Cys Ser Leu Ala Pro Gly Glu Ser  
35 40 45

Pro Arg Leu Pro Arg Glu Leu Gly Glu Arg Asn Trp Arg Arg Ser Thr  
50 55 60

Pro Gly Gly Ser Ala Leu Gln His Glu Pro Ile Ser Ser Arg Ser Arg  
65 70 75 80

Ser Arg Arg Pro Gly Arg Gly Ala Ala Ser Glu Asp Glu Asn Gly Asp  
85 90 95

Asp Gln Gly Phe Gln Glu Gly Glu Asp Glu Leu Gly Asp Glu Glu Glu  
100 105 110

Gly Ala Gly Asp Glu Asn Gly His Gly Glu Gln Gln Pro Gln Pro Pro  
115 120 125



Ala Thr Gln Gln Gln Gln Pro Gln Gln Gln Arg Gly Ala Ala Lys Glu  
130 135 140

Ala Ala Gly Lys Ser Ser Gly Pro Thr Ser Leu Phe Ala Val Thr Val  
145 150 155 160

Ala Pro Pro Gly Ala Arg Gln Gly Gln Gln Gln Ala Gly Gly Asp Gly  
165 170 175

Lys Thr Glu Gln Lys Gly Gly Asp Lys Lys Arg Gly Val Lys Arg Pro  
180 185 190

Arg Glu Asp His Gly Arg Gly Tyr Phe Glu Tyr Ile Glu Glu Asn Lys  
195 200 205

Tyr Ser Arg Ala Lys Ser Pro Gln Pro Pro Val Glu Glu Glu Asp Glu  
210 215 220

His Phe Asp Asp Thr Val Val Cys Leu Asp Thr Tyr Asn Cys Asp Leu  
225 230 235 240

His Phe Lys Ile Ser Arg Asp Arg Leu Ser Ala Ser Ser Leu Thr Met  
245 250 255

Glu Ser Phe Ala Phe Leu Trp Ala Gly Gly Arg Ala Ser Tyr Gly Val  
260 265 270

Ser Lys Gly Lys Val Cys Phe Glu Met Lys Val Thr Glu Lys Ile Pro  
275 280 285

Val Arg His Leu Tyr Thr Lys Asp Ile Asp Ile His Glu Val Arg Ile  
290 295 300

Gly Trp Ser Leu Thr Thr Ser Gly Met Leu Leu Gly Glu Glu Glu Phe  
305 310 315 320

Ser Tyr Gly Tyr Ser Leu Lys Gly Ile Lys Thr Cys Asn Cys Glu Thr  
325 330 335

Glu Asp Tyr Gly Glu Lys Phe Asp Glu Asn Asp Val Ile Thr Cys Phe  
340 345 350

Ala Asn Phe Glu Ser Asp Glu Val Glu Leu Ser Tyr Ala Lys Asn Gly  
355 360 365

Gln Asp Leu Gly Val Ala Phe Lys Ile Ser Lys Glu Val Leu Ala Gly  
370 375 380

Arg Pro Leu Phe Pro His Val Leu Cys His Asn Cys Ala Val Glu Phe  
385 390 395 400

Asn Phe Gly Gln Lys Glu Lys Pro Tyr Phe Pro Ile Pro Glu Glu Tyr  
405 410 415

Thr Phe Ile Gln Asn Val Pro Leu Glu Asp Arg Val Arg Gly Pro Lys  
420 425 430

Gly Pro Glu Glu Lys Lys Asp Cys Glu Val Val Met Met Ile Gly Leu  
435 440 445

Pro Gly Ala Gly Lys Thr Thr Trp Val Thr Lys His Ala Ala Glu Asn  
450 455 460

Pro Gly Lys Tyr Asn Ile Leu Gly Thr Asn Thr Ile Met Asp Lys Met  
465 470 475 480

Met Val Ala Gly Phe Lys Lys Gln Met Ala Asp Thr Gly Lys Leu Asn  
485 490 495

Thr Leu Leu Gln Arg Ala Pro Gln Cys Leu Gly Lys Phe Ile Glu Ile  
500 505 510

Ala Ala Arg Lys Lys Arg Asn Phe Ile Leu Asp Gln Thr Asn Val Ser  
515 520 525

Ala Ala Ala Gln Arg Arg Lys Met Cys Leu Phe Ala Gly Phe Gln Arg  
530 535 540

Lys Ala Val Val Val Cys Pro Lys Asp Glu Asp Tyr Lys Gln Arg Thr  
545 550 555 560

Gln Lys Lys Ala Glu Val Glu Gly Lys Asp Leu Pro Glu His Ala Val  
565 570 575

Leu Lys Met Lys Gly Asn Phe Thr Leu Pro Glu Val Ala Glu Cys Phe  
580 585 590

Asp Glu Ile Thr Tyr Val Glu Leu Gln Lys Glu Glu Ala Gln Lys Leu  
595 600 605

Leu Glu Gln Tyr Lys Glu Glu Ser Lys Lys Ala Leu Pro Pro Glu Lys  
610 615 620

Lys Gln Asn Thr Gly Ser Lys Lys Ser Asn Lys Asn Lys Ser Gly Lys  
625 630 635 640

Asn Gln Phe Asn Arg Gly Gly Gly His Arg Gly Arg Gly Gly Phe Asn  
645 650 655

Met Arg Gly Gly Asn Phe Arg Gly Gly Ala Pro Gly Asn Arg Gly Gly  
660 665 670

Tyr Asn Arg Arg Gly Asn Met Pro Gln Arg Gly Gly Gly Gly Gly Gly  
675 680 685

Ser Gly Gly Ile Gly Tyr Pro Tyr Pro Arg Ala Pro Val Phe Pro Gly  
690 695 700

Arg Gly Ser Tyr Ser Asn Arg Gly Asn Tyr Asn Arg Gly Gly Met Pro  
705 710 715 720

Asn Arg Gly Asn Tyr Asn Gln Asn Phe Arg Gly Arg Gly Asn Asn Arg  
725 730 735

Gly Tyr Lys Asn Gln Ser Gln Gly Tyr Asn Gln Trp Gln Gln Gly Gln  
740 745 750

Phe Trp Gly Gln Lys Pro Trp Ser Gln His Tyr His Gln Gly Tyr Tyr  
755 760 765

<210> 201

<211> 793

<212> PRT

<213> Homo sapien

<400> 201

Ile Gly Ser Ala Leu Arg Gly Leu His Arg Ala Leu Gly Pro Gly Ser  
1 5 10 15

Ala Trp Gly Arg Gly Gly Lys Tyr Gly Asn Gly Arg Gly Arg Ala Arg  
20 25 30

Ala Arg Ser Gly Phe Pro Pro Ala Gln Cys Ser Arg Gln Arg Arg Gly  
35 40 45

Arg Gly Ala Tyr Ile Thr Cys Ala Ala Pro Leu Leu Arg Glu Asp Val  
50 55 60

Ala Cys Ser Leu Ala Pro Gly Glu Ser Pro Arg Leu Pro Arg Glu Leu  
 65 70 75 80

Gly Glu Arg Asn Trp Arg Arg Ser Thr Pro Gly Gly Ser Ala Leu Gln  
 85 90 95

His Glu Pro Ile Ser Ser Arg Ser Arg Ser Arg Arg Pro Gly Arg Gly  
 100 105 110

Ala Ala Ser Glu Asp Glu Asn Gly Asp Asp Gln Gly Phe Gln Glu Gly  
 115 120 125

Glu Asp Glu Leu Gly Asp Glu Glu Glu Gly Ala Gly Asp Glu Asn Gly  
 130 135 140

His Gly Glu Gln Gln Pro Gln Pro Pro Ala Thr Gln Gln Gln Gln Pro  
 145 150 155 160

Gln Gln Gln Arg Gly Ala Ala Lys Glu Ala Ala Gly Lys Ser Ser Gly  
 165 170 175

Pro Thr Ser Leu Phe Ala Val Thr Val Ala Pro Pro Gly Ala Arg Gln  
 180 185 190

Gly Gln Gln Gln Ala Gly Gly Asp Gly Lys Thr Glu Gln Lys Gly Gly  
 195 200 205

Asp Lys Lys Arg Gly Val Lys Arg Pro Arg Glu Asp His Gly Arg Gly  
 210 215 220

Tyr Phe Glu Tyr Ile Glu Glu Asn Lys Tyr Ser Arg Ala Lys Ser Pro  
 225 230 235 240

Gln Pro Pro Val Glu Glu Glu Asp Glu His Phe Asp Asp Thr Val Val  
 245 250 255

Cys Leu Asp Thr Tyr Asn Cys Asp Leu His Phe Lys Ile Ser Arg Asp  
 260 265 270

Arg Leu Ser Ala Ser Ser Leu Thr Met Glu Ser Phe Ala Phe Leu Trp  
 275 280 285

Ala Gly Gly Arg Ala Ser Tyr Gly Val Ser Lys Gly Lys Val Cys Phe  
 290 295 300

Glu Met Lys Val Thr Glu Lys Ile Pro Val Arg His Leu Tyr Thr Lys  
 305 310 315 320

Asp Ile Asp Ile His Glu Val Arg Ile Gly Trp Ser Leu Thr Thr Ser  
 325 330 335

Gly Met Leu Leu Gly Glu Glu Glu Phe Ser Tyr Gly Tyr Ser Leu Lys  
 340 345 350

Gly Ile Lys Thr Cys Asn Cys Glu Thr Glu Asp Tyr Gly Glu Lys Phe  
 355 360 365

Asp Glu Asn Asp Val Ile Thr Cys Phe Ala Asn Phe Glu Ser Asp Glu  
 370 375 380

Val Glu Leu Ser Tyr Ala Lys Asn Gly Gln Asp Leu Gly Val Ala Phe  
 385 390 395 400

Lys Ile Ser Lys Glu Val Leu Ala Gly Arg Pro Leu Phe Pro His Val  
 405 410 415

Leu Cys His Asn Cys Ala Val Glu Phe Asn Phe Gly Gln Lys Glu Lys  
 420 425 430

Pro Tyr Phe Pro Ile Pro Glu Glu Tyr Thr Phe Ile Gln Asn Val Pro  
 435 440 445

Leu Glu Asp Arg Val Arg Gly Pro Lys Gly Pro Glu Glu Lys Lys Asp  
 450 455 460

Cys Glu Val Val Met Met Ile Gly Leu Pro Gly Ala Gly Lys Thr Thr  
 465 470 475 480

Trp Val Thr Lys His Ala Ala Glu Asn Pro Gly Lys Tyr Asn Ile Leu  
 485 490 495

Gly Thr Asn Thr Ile Met Asp Lys Met Met Val Ala Gly Phe Lys Lys  
 500 505 510

Gln Met Ala Asp Thr Gly Lys Leu Asn Thr Leu Leu Gln Arg Ala Pro  
 515 520 525

Gln Cys Leu Gly Lys Phe Ile Glu Ile Ala Ala Arg Lys Lys Arg Asn  
 530 535 540

Phe Ile Leu Asp Gln Thr Asn Val Ser Ala Ala Ala Gln Arg Arg Lys  
 545 550 555 560

Met Cys Leu Phe Ala Gly Phe Gln Arg Lys Ala Val Val Val Cys Pro  
 565 570 575

Lys Asp Glu Asp Tyr Lys Gln Arg Thr Gln Lys Lys Ala Glu Val Glu  
 580 585 590

Gly Lys Asp Leu Pro Glu His Ala Val Leu Lys Met Lys Gly Asn Phe  
 595 600 605

Thr Leu Pro Glu Val Ala Glu Cys Phe Asp Glu Ile Thr Tyr Val Glu  
 610 615 620

Leu Gln Lys Glu Glu Ala Gln Lys Leu Leu Glu Gln Tyr Lys Glu Glu  
 625 630 635 640

Ser Lys Lys Ala Leu Pro Pro Glu Lys Lys Gln Asn Thr Gly Ser Lys  
 645 650 655

Lys Ser Asn Lys Asn Lys Ser Gly Lys Asn Gln Phe Asn Arg Gly Gly  
 660 665 670

Gly His Arg Gly Arg Gly Gly Phe Asn Met Arg Gly Gly Asn Phe Arg  
 675 680 685

Gly Gly Ala Pro Gly Asn Arg Gly Gly Tyr Asn Arg Arg Gly Asn Met  
 690 695 700

Pro Gln Arg Gly Gly Gly Gly Gly Gly Ser Gly Gly Ile Gly Tyr Pro  
 705 710 715 720

Tyr Pro Arg Ala Pro Val Phe Pro Gly Arg Gly Ser Tyr Ser Asn Arg  
 725 730 735

Gly Asn Tyr Asn Arg Gly Gly Met Pro Asn Arg Gly Asn Tyr Asn Gln  
 740 745 750

Asn Phe Arg Gly Arg Gly Asn Asn Arg Gly Tyr Lys Asn Gln Ser Gln  
 755 760 765

Gly Tyr Asn Gln Trp Gln Gln Gly Gln Phe Trp Gly Gln Lys Pro Trp  
 770 775 780

Ser Gln His Tyr His Gln Gly Tyr Tyr

785

790

&lt;210&gt; 202

&lt;211&gt; 325

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 202

Met Ile Phe Arg Asp Phe Ile Phe Ala Gln Val Ile Ser Lys Tyr Glu  
1 5 10 15

Asp Ile Phe Phe Val Phe Phe Gln Val Gly Cys Leu Lys Phe Phe Pro  
20 25 30

Phe Phe Ile Pro Leu Pro Lys Ala Asn Glu Lys Lys Val Asp Gln Pro  
35 40 45

Pro Glu Ala Lys Lys Pro Lys Ile Lys Val Val Asn Val Glu Leu Pro  
50 55 60

Ile Glu Ala Asn Leu Val Trp Gln Leu Gly Lys Asp Leu Leu Asn Met  
65 70 75 80

Tyr Ile Glu Thr Glu Gly Lys Met Ile Met Gln Asp Lys Leu Glu Lys  
85 90 95

Glu Arg Asn Asp Ala Lys Asn Ala Val Glu Glu Tyr Val Tyr Glu Phe  
100 105 110

Arg Asp Lys Leu Cys Gly Pro Tyr Glu Lys Phe Ile Cys Glu Gln Asp  
115 120 125

His Gln Asn Phe Leu Arg Leu Leu Thr Glu Thr Glu Asp Trp Leu Tyr  
130 135 140

Glu Glu Gly Glu Asp Gln Ala Lys Gln Ala Tyr Val Asp Lys Leu Glu  
145 150 155 160

Glu Leu Met Lys Ile Gly Thr Pro Val Lys Val Arg Phe Gln Glu Ala  
165 170 175

Glu Glu Arg Pro Lys Met Phe Glu Glu Leu Gly Gln Arg Leu Gln His  
180 185 190

Tyr Ala Lys Ile Ala Ala Asp Phe Arg Asn Lys Asp Glu Lys Tyr Asn  
195 200 205

His Ile Asp Glu Ser Glu Met Lys Lys Val Glu Lys Ser Val Asn Glu  
 210 215 220

Val Met Glu Trp Met Asn Asn Val Met Asn Ala Gln Ala Lys Lys Ser  
 225 230 235 240

Leu Asp Gln Asp Pro Val Val Arg Ala Gln Glu Ile Lys Thr Lys Ile  
 245 250 255

Lys Glu Leu Asn Asn Thr Cys Glu Pro Val Val Thr Gln Pro Lys Pro  
 260 265 270

Lys Ile Glu Ser Pro Lys Leu Glu Arg Thr Pro Asn Gly Pro Asn Ile  
 275 280 285

Asp Lys Lys Glu Glu Asp Leu Glu Asp Lys Asn Asn Phe Gly Ala Glu  
 290 295 300

Pro Pro His Gln Asn Gly Glu Cys Tyr Pro Asn Glu Lys Asn Ser Val  
 305 310 315 320

Asn Met Asp Leu Asp  
 325

<210> 203  
 <211> 131  
 <212> PRT  
 <213> Homo sapien

<400> 203

Met Lys Val Gln Asn Arg Arg Asn Ala His Leu Ser Ser Phe Asp Arg  
 1 5 10 15

Phe Ala Phe Leu Trp Glu Met Gln Phe Arg Val Thr Cys Cys Arg Arg  
 20 25 30

Tyr Val Val Asp His Leu Asp Ile Ile Ala Glu Asp Glu Leu Leu Asp  
 35 40 45

Gln Leu Leu Ser His Thr Ala Ser Leu Ser Asp Leu Leu Gln Asn Ser  
 50 55 60

Val Val Ala Thr Ala Gln Thr Arg Leu Arg Ser Tyr Ser Cys Ala Ser  
 65 70 75 80

Leu Arg Phe Ser Ser Ala Thr Met Ser Asp Lys Pro Asp Met Ala Glu



85 90 95

Ile Glu Lys Phe Asp Lys Ser Lys Leu Lys Lys Thr Glu Thr Gln Glu  
100 105 110

Lys Asn Pro Leu Pro Ser Lys Glu Thr Ile Glu Gln Glu Lys Gln Ala  
115 120 125

Gly Glu Ser  
130

<210> 204  
 <211> 116  
 <212> PRT  
 <213> Homo sapien

<400> 204

Ser Leu Arg Leu Pro Trp Glu Met Gln Phe Arg Val Thr Cys Cys Arg  
1 5 10 15

Arg Tyr Val Val Asp His Leu Asp Ile Ile Ala Glu Asp Glu Leu Leu  
20 25 30

Asp Gln Leu Leu Ser His Thr Ala Ser Leu Ser Asp Leu Leu Gln Asn  
35 40 45

Ser Val Val Ala Thr Ala Gln Thr Arg Leu Arg Ser Tyr Ser Cys Ala  
50 55 60

Ser Leu Arg Phe Ser Ser Ala Thr Met Ser Asp Lys Pro Asp Met Ala  
65 70 75 80

Glu Ile Glu Lys Phe Asp Lys Ser Lys Leu Lys Lys Thr Glu Thr Gln  
85 90 95

Glu Lys Asn Pro Leu Pro Ser Lys Glu Thr Ile Glu Gln Glu Lys Gln  
100 105 110

Ala Gly Glu Ser  
115

<210> 205  
 <211> 63  
 <212> PRT  
 <213> Homo sapien

<400> 205

Met Cys Leu Gly Val Cys Ser Phe Arg Cys Ser Asp Met Ser Arg Val  
1 5 10 15

Ser Ser Phe Gln Trp Val Arg Gly Leu Thr Asp Phe Arg Asn Glu Ala  
20 25 30

Ala Tyr Ala His Ala Pro Gln Lys Ser Ser Pro Ser Pro His Ser Thr  
35 40 45

Gln Glu Val Leu Leu Ser Ser Pro Val Thr Ser Tyr Trp Gly Gly  
50 55 60

<210> 206

<211> 97

<212> PRT

<213> Homo sapien

<400> 206

Cys Val Ser Glu Phe Val Pro Ser Asp Val Gln Ile Cys Pro Glu Phe  
1 5 10 15

Leu Pro Ser Ser Gly Phe Val Val Ser Leu Thr Ser Gly Met Lys Leu  
20 25 30

His Thr Leu Thr Leu His Arg Lys Val Leu Gln Val Pro Thr Arg Pro  
35 40 45

Arg Lys Ser Cys Cys Leu His Leu Ser Pro Ala Thr Gly Glu Ala Glu  
50 55 60

Ala Gly Glu Ser Leu Glu Pro Arg Arg Trp Arg Leu Leu Gly Ala Lys  
65 70 75 80

Pro Arg Ser Arg His Tyr Thr Pro Ala Trp Gln Gln Ser Glu Thr Pro  
85 90 95

Ser

<210> 207

<211> 163

<212> PRT

<213> Homo sapien

<400> 207

Met Asn Gly Glu Tyr Tyr Gln Glu Ser Asn Gly Pro Thr Asp Ser Tyr  
1 5 10 15

Ala Ala Ile Ser Gln Val Asp Arg Leu Gln Ser Glu Pro Glu Ser Ile  
20 25 30

Arg Lys Trp Arg Glu Glu Gln Met Glu Arg Leu Glu Ala Leu Asp Ala  
35 40 45

Asn Ser Arg Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu  
50 55 60

Leu Glu Glu Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys  
65 70 75 80

Ala Asn Asn Arg Ala Ala Glu Glu Ala Phe Val Asn Asp Ile Asp Glu  
85 90 95

Ser Ser Pro Gly Thr Glu Trp Glu Arg Val Ala Arg Leu Cys Asp Phe  
100 105 110

Asn Pro Lys Ser Ser Lys Gln Ala Lys Asp Val Phe Pro Pro Cys Ala  
115 120 125

Gln Ser Ser Ser Pro Ser Ser Arg Pro Leu Val Leu Glu Ala Pro Val  
130 135 140

Asp Leu Leu Val Leu Pro Arg Gly Leu Arg Trp Val Leu Gly Trp Pro  
145 150 155 160

Leu Leu Ala

<210> 208  
<211> 283  
<212> PRT  
<213> Homo sapien

<400> 208

Arg Leu Gly Thr Arg Leu Gly Val Ala Pro Leu Pro Val Gly Thr Thr  
1 5 10 15

Ala Val Ala Ala Gly Arg Gly Val Gly Gly Ser Val Gly Phe Cys Leu  
20 25 30

Thr Val Gly Val Arg Ala Val Gln Leu Pro Ala Met Ala Glu Leu Asp  
35 40 45

Pro Phe Gly Ala Pro Ala Gly Ala Pro Gly Gly Pro Ala Leu Gly Asn

```

50              55              60

Gly Val Ala Gly Ala Gly Glu Glu Asp Pro Ala Ala Ala Phe Leu Ala
65              70              75              80

Gln Gln Glu Ser Glu Ile Ala Gly Ile Glu Asn Asp Glu Ala Phe Ala
85              90              95

Ile Leu Asp Gly Gly Ala Pro Gly Pro Gln Pro His Gly Glu Pro Pro
100             105             110

Gly Gly Pro Asp Ala Val Asp Gly Val Met Asn Gly Glu Tyr Tyr Gln
115             120             125

Glu Ser Asn Gly Pro Thr Asp Ser Tyr Ala Ala Ile Ser Gln Val Asp
130             135             140

Arg Leu Gln Ser Glu Pro Glu Ser Ile Arg Lys Trp Arg Glu Glu Gln
145             150             155             160

Met Glu Arg Leu Glu Ala Leu Asp Ala Asn Ser Arg Lys Gln Glu Ala
165             170             175

Glu Trp Lys Glu Lys Ala Ile Lys Glu Leu Glu Glu Trp Tyr Ala Arg
180             185             190

Gln Asp Glu Gln Leu Gln Lys Thr Lys Ala Asn Asn Arg Ala Ala Glu
195             200             205

Glu Ala Phe Val Asn Asp Ile Asp Glu Ser Ser Pro Gly Thr Glu Trp
210             215             220

Glu Arg Val Ala Arg Leu Cys Asp Phe Asn Pro Lys Ser Ser Lys Gln
225             230             235             240

Ala Lys Asp Val Ser Arg Met Arg Ser Val Leu Ile Ser Leu Lys Gln
245             250             255

Ala Ala Gly Ala Gly Gly Pro Val Asp Leu Leu Val Leu Pro Arg Gly
260             265             270

Leu Arg Trp Val Leu Gly Trp Pro Leu Leu Ala
275             280

<210> 209
<211> 222

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&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 209

Met Ala Glu Leu Asp Pro Phe Gly Ala Pro Ala Gly Ala Pro Gly Gly  
 1 5 10 15

Pro Ala Leu Gly Asn Gly Val Ala Gly Ala Gly Glu Glu Asp Pro Ala  
 20 25 30

Ala Ala Phe Leu Ala Gln Gln Glu Ser Glu Ile Ala Gly Ile Glu Asn  
 35 40 45

Asp Glu Ala Phe Ala Ile Leu Asp Gly Ala Ala Pro Pro Gly Pro Ser  
 50 55 60

Arg Thr Ala Ser Arg Arg Gly Val Arg Met Gln Glu Ser Asn Gly Pro  
 65 70 75 80

Thr Asp Ser Tyr Ala Ala Ile Ser Gln Val Asp Arg Leu Gln Ser Glu  
 85 90 95

Pro Glu Ser Ile Arg Lys Trp Arg Glu Glu Gln Met Glu Arg Leu Glu  
 100 105 110

Ala Leu Asp Ala Asn Ser Arg Lys Gln Glu Ala Glu Trp Lys Glu Lys  
 115 120 125

Ala Ile Lys Glu Leu Glu Glu Trp Tyr Ala Arg Gln Asp Glu Gln Leu  
 130 135 140

Gln Lys Thr Lys Ala Asn Asn Arg Ala Ala Glu Glu Ala Phe Val Asn  
 145 150 155 160

Asp Ile Asp Glu Ser Ser Pro Gly Thr Glu Trp Glu Arg Val Ala Arg  
 165 170 175

Leu Cys Asp Phe Asn Pro Lys Ser Ser Lys Gln Ala Lys Asp Val Phe  
 180 185 190

Pro Pro Cys Ala Gln Ser Ser Ser Pro Ser Ser Arg Pro Arg Trp Cys  
 195 200 205

Thr Glu Glu Pro Pro Cys Gly Asn Thr Thr Ser Ala Ile Ser  
 210 215 220

<210> 210  
 <211> 250  
 <212> PRT  
 <213> Homo sapien

<400> 210

Asn Arg Thr Arg Gly Ala Leu Val Leu Leu Ser Gln Ser Ala Pro Gln  
 1 5 10 15

Arg Trp Leu Pro Gly Val Val Ser Val Gly Arg Leu Val Phe Val Ser  
 20 25 30

Pro Leu Val Ser Val Pro Phe Ser Cys Pro Pro Trp Leu Ser Trp Ile  
 35 40 45

Arg Ser Ala Pro Leu Pro Ala Pro Leu Ala Val Pro Arg Trp Gly Thr  
 50 55 60

Glu Trp Pro Ala Pro Ala Lys Lys Thr Arg Leu Arg Pro Ser Trp Arg  
 65 70 75 80

Ser Lys Arg Ala Arg Leu Arg Ala Ser Arg Thr Thr Arg Pro Ser Pro  
 85 90 95

Ser Trp Thr Ala Ala Pro Pro Gly Pro Ser Arg Thr Ala Ser Arg Arg  
 100 105 110

Gly Val Arg Met Gln Glu Ser Asn Gly Pro Thr Asp Ser Tyr Ala Ala  
 115 120 125

Ile Ser Gln Val Asp Arg Leu Gln Ser Glu Pro Glu Ser Ile Arg Lys  
 130 135 140

Trp Arg Glu Glu Gln Met Glu Arg Leu Glu Ala Leu Asp Ala Asn Ser  
 145 150 155 160

Arg Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu Leu Glu  
 165 170 175

Glu Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys Ala Asn  
 180 185 190

Asn Arg Ala Ala Glu Glu Ala Phe Val Asn Asp Ile Asp Glu Ser Ser  
 195 200 205

Pro Gly Thr Glu Trp Glu Arg Val Ala Arg Leu Cys Asp Phe Asn Pro  
 210 215 220

Lys Ser Ser Lys Gln Ala Lys Asp Val Ser Arg Met Arg Ser Val Leu  
 225 230 235 240

Ile Ser Leu Lys Gln Ala Pro Leu Val His  
 245 250

<210> 211  
 <211> 142  
 <212> PRT  
 <213> Homo sapien

<400> 211

Ser Ser Arg Ser Arg Ala Ala Ala Arg Asp Leu Glu Pro Asp Ala Trp  
 1 5 10 15

Gly Ala Cys Pro Pro Leu Pro Val Gly Thr Thr Ala Val Ala Ala Gly  
 20 25 30

Arg Gly Val Gly Gly Ser Val Gly Phe Cys Leu Thr Val Gly Val Arg  
 35 40 45

Ala Val Gln Leu Pro Ala Met Ala Glu Leu Asp Pro Phe Gly Ala Pro  
 50 55 60

Ala Gly Ala Pro Gly Gly Pro Ala Leu Gly Asn Gly Val Ala Gly Ala  
 65 70 75 80

Gly Glu Glu Asp Pro Ala Ala Ala Phe Leu Ala Gln Gln Glu Ser Glu  
 85 90 95

Ile Ala Gly Ile Glu Asn Asp Glu Ala Phe Ala Ile Leu Asp Gly Ala  
 100 105 110

Ala Pro Pro Gly Pro Ser Arg Thr Ala Ser Arg Arg Gly Val Arg Met  
 115 120 125

Pro Ile Leu Gly Ser Lys Lys Gln Ser Gly Lys Lys Arg Gln  
 130 135 140

<210> 212  
 <211> 220  
 <212> PRT  
 <213> Homo sapien

<400> 212

Ser Ser Arg Ser Arg Ala Ala Ala Arg Asp Leu Glu Pro Asp Ala Trp

332/383

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1              5              10              15

Gly Ala Cys Pro Pro Leu Pro Val Gly Thr Thr Ala Val Ala Ala Gly
      20              25              30

Arg Gly Val Gly Gly Ser Val Gly Phe Cys Leu Thr Val Gly Val Arg
      35              40              45

Ala Val Gln Leu Pro Ala Met Ala Glu Leu Asp Pro Phe Gly Ala Pro
      50              55              60

Ala Gly Ala Pro Gly Gly Pro Ala Leu Gly Asn Gly Val Ala Gly Ala
      65              70              75              80

Gly Glu Glu Asp Pro Ala Ala Ala Phe Leu Ala Gln Gln Glu Ser Glu
      85              90              95

Ile Ala Gly Ile Glu Asn Asp Glu Ala Phe Ala Ile Leu Asp Gly Gly
      100              105              110

Ala Pro Gly Pro Gln Pro His Gly Glu Pro Pro Gly Gly Pro Asp Ala
      115              120              125

Asn Ser Arg Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu
      130              135              140

Leu Glu Glu Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys
      145              150              155              160

Ala Asn Asn Arg Ala Ala Glu Glu Ala Phe Val Asn Asp Ile Asp Glu
      165              170              175

Ser Ser Pro Gly Thr Glu Trp Glu Arg Val Ala Arg Leu Cys Asp Phe
      180              185              190

Asn Pro Lys Ser Ser Lys Gln Ala Lys Asp Val Ser Arg Met Arg Ser
      195              200              205

Val Leu Ile Ser Leu Lys Gln Ala Pro Leu Val His
      210              215              220

<210> 213
<211> 111
<212> PRT
<213> Homo sapien

<400> 213

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Met Asn Gly Glu Tyr Tyr Gln Glu Ser Asn Gly Pro Thr Asp Ser Tyr  
1 5 10 15

Ala Ala Ile Ser Gln Val Asp Arg Leu Gln Ser Glu Pro Glu Ser Ile  
20 25 30

Arg Lys Trp Arg Glu Glu Gln Met Glu Arg Leu Glu Ala Leu Asp Ala  
35 40 45

Asn Ser Arg Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu  
50 55 60

Leu Glu Glu Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys  
65 70 75 80

Ala Asn Asn Arg Val Ala Asp Glu Ala Phe Tyr Lys Gln Pro Phe Ala  
85 90 95

Asp Val Ile Gly Tyr Val Gln Gly Ser Arg Arg Ser Leu Cys Lys  
100 105 110

<210> 214  
<211> 236  
<212> PRT  
<213> Homo sapien  
  
<400> 214

Gly Phe Arg Phe Thr Arg Leu Pro Pro Gly Ala Cys Pro Pro Leu Pro  
1 5 10 15

Val Gly Thr Thr Ala Val Ala Ala Gly Arg Gly Val Gly Gly Ser Val  
20 25 30

Gly Phe Cys Leu Thr Val Gly Val Arg Ala Val Gln Leu Pro Ala Met  
35 40 45

Ala Glu Leu Asp Pro Phe Gly Ala Pro Ala Gly Ala Pro Gly Gly Pro  
50 55 60

Ala Leu Gly Asn Gly Val Ala Gly Ala Gly Glu Glu Asp Pro Ala Ala  
65 70 75 80

Ala Phe Leu Ala Gln Gln Glu Ser Glu Ile Ala Gly Ile Glu Asn Asp  
85 90 95

Glu Ala Phe Ala Ile Leu Asp Gly Gly Ala Pro Gly Pro Gln Pro His

100 105 110  
 Gly Glu Pro Pro Gly Gly Pro Asp Ala Val Asp Gly Val Met Asn Gly  
 115 120 125  
 Glu Tyr Tyr Gln Glu Ser Asn Gly Pro Thr Asp Ser Tyr Ala Ala Ile  
 130 135 140  
 Ser Gln Val Asp Arg Leu Gln Ser Glu Pro Glu Ser Ile Arg Lys Trp  
 145 150 155 160  
 Arg Glu Glu Gln Met Glu Arg Leu Glu Ala Leu Asp Ala Asn Ser Arg  
 165 170 175  
 Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu Leu Glu Glu  
 180 185 190  
 Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys Ala Asn Asn  
 195 200 205  
 Arg Val Ala Asp Glu Ala Phe Tyr Lys Gln Pro Phe Ala Asp Val Ile  
 210 215 220  
 Gly Tyr Val Gln Gly Ser Arg Arg Ser Leu Cys Lys  
 225 230 235  
 <210> 215  
 <211> 211  
 <212> PRT  
 <213> Homo sapien  
 <400> 215  
 Met Asn Gly Glu Tyr Tyr Gln Glu Ser Asn Gly Pro Thr Asp Ser Tyr  
 1 5 10 15  
 Ala Ala Ile Ser Gln Val Asp Arg Leu Gln Ser Glu Pro Glu Ser Ile  
 20 25 30  
 Arg Lys Trp Arg Glu Glu Gln Met Glu Arg Leu Glu Ala Leu Asp Ala  
 35 40 45  
 Asn Ser Arg Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu  
 50 55 60  
 Leu Glu Glu Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys  
 65 70 75 80

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<210> 216
<211> 263
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (263)..(263)
<223> X=any amino acid
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**<400> 216**

Gly Phe Arg Phe Thr Arg Leu Pro Pro Gly Ala Cys Pro Pro Leu Pro  
1 5 10 15

Val Gly Thr Thr Ala Val Ala Ala Gly Arg Gly Val Gly Gly Ser Val  
20 25 30

Gly Phe Cys Leu Thr Val Gly Val Arg Ala Val Gln Leu Pro Ala Met  
35 40 45

Ala Glu Leu Asp Pro Phe Gly Ala Pro Ala Gly Ala Pro Gly Gly Pro  
 50 55 60

Ala Leu Gly Asn Gly Val Ala Gly Ala Gly Glu Glu Asp Pro Ala Ala  
 65 70 75 80

Ala Phe Leu Ala Gln Gln Glu Ser Glu Ile Ala Gly Ile Glu Asn Asp  
 85 90 95

Glu Ala Phe Ala Ile Leu Asp Gly Gly Ala Pro Gly Pro Gln Pro His  
 100 105 110

Gly Glu Pro Pro Gly Gly Pro Asp Ala Val Asp Gly Val Met Asn Gly  
 115 120 125

Glu Tyr Tyr Gln Glu Ser Asn Gly Pro Thr Asp Ser Tyr Ala Ala Ile  
 130 135 140

Ser Gln Val Asp Arg Leu Gln Ser Glu Pro Glu Ser Ile Arg Lys Trp  
 145 150 155 160

Arg Glu Glu Gln Met Glu Arg Leu Glu Ala Leu Asp Ala Asn Ser Arg  
 165 170 175

Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu Leu Glu Glu  
 180 185 190

Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys Ala Asn Asn  
 195 200 205

Arg Ala Ala Glu Glu Ala Phe Val Asn Asp Ile Asp Glu Ser Ser Pro  
 210 215 220

Gly Thr Glu Trp Glu Arg Val Ala Arg Leu Cys Asp Phe Asn Pro Lys  
 225 230 235 240

Ser Ser Lys Gln Ala Lys Asp Val Ser Arg Met Arg Ser Val Leu Ile  
 245 250 255

Ser Leu Lys Gln Ala Arg Xaa  
 260

<210> 217  
 <211> 150  
 <212> PRT  
 <213> Homo sapien

&lt;400&gt; 217

Met Asn Gly Glu Tyr Tyr Gln Glu Ser Asn Gly Pro Thr Asp Ser Tyr  
 1 5 10 15

Ala Ala Ile Ser Gln Val Asp Arg Leu Gln Ser Glu Pro Glu Ser Ile  
 20 25 30

Arg Lys Trp Arg Glu Glu Gln Met Glu Arg Leu Glu Ala Leu Asp Ala  
 35 40 45

Asn Ser Arg Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu  
 50 55 60

Leu Glu Glu Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys  
 65 70 75 80

Ala Asn Asn Arg Ala Ala Glu Glu Ala Phe Val Asn Asp Ile Asp Glu  
 85 90 95

Ser Ser Pro Gly Thr Glu Trp Glu Arg Val Ala Arg Leu Cys Asp Phe  
 100 105 110

Asn Pro Lys Ser Ser Lys Arg Ala Arg Cys Phe Pro Met Ala Gln Thr  
 115 120 125

His Ser Ser Arg Arg Pro Val Cys Leu Arg Ala Pro Val Glu Pro Thr  
 130 135 140

Leu Ile Phe Ile Tyr Gln  
 145 150

&lt;210&gt; 218

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 218

Gly Phe Arg Phe Thr Arg Leu Pro Pro Gly Ala Cys Pro Pro Leu Pro  
 1 5 10 15

Val Gly Thr Thr Ala Val Ala Ala Gly Arg Gly Val Gly Gly Ser Val  
 20 25 30

Gly Phe Cys Leu Thr Val Gly Val Arg Ala Val Gln Leu Pro Ala Met  
 35 40 45

Ala Glu Leu Asp Pro Phe Gly Ala Pro Ala Gly Ala Pro Gly Gly Pro  
 50 55 60

Ala Leu Gly Asn Gly Val Ala Gly Ala Gly Glu Glu Asp Pro Ala Ala  
 65 70 75 80

Ala Phe Leu Ala Gln Gln Glu Ser Glu Ile Ala Gly Ile Glu Asn Asp  
 85 90 95

Glu Ala Phe Ala Ile Leu Asp Gly Gly Ala Pro Gly Pro Gln Pro His  
 100 105 110

Gly Glu Pro Pro Gly Gly Pro Asp Ala Val Asp Gly Val Met Asn Gly  
 115 120 125

Glu Tyr Tyr Gln Glu Ser Asn Gly Pro Thr Asp Ser Tyr Ala Ala Ile  
 130 135 140

Ser Gln Val Asp Arg Leu Gln Ser Glu Pro Glu Ser Ile Arg Lys Trp  
 145 150 155 160

Arg Glu Glu Gln Met Glu Arg Leu Glu Ala Leu Asp Ala Asn Ser Arg  
 165 170 175

Lys Gln Glu Ala Glu Trp Lys Glu Lys Ala Ile Lys Glu Leu Glu Glu  
 180 185 190

Trp Tyr Ala Arg Gln Asp Glu Gln Leu Gln Lys Thr Lys Ala Asn Asn  
 195 200 205

Arg Ala Ala Glu Glu Ala Phe Val Asn Asp Ile Asp Glu Ser Ser Pro  
 210 215 220

Gly Thr Glu Trp Glu Arg Val Ala Arg Leu Cys Asp Phe Asn Pro Lys  
 225 230 235 240

Ser Ser Lys Arg Ala Arg Cys Phe Pro Met Ala Gln Ser His Ser Ser  
 245 250 255

Arg Arg Pro Val Cys Leu Arg Ala Leu Trp Asn Leu His  
 260 265

&lt;210&gt; 219

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 219

Met Lys Ala Leu Ile Val Leu Gly Leu Val Leu Leu Ser Val Thr Val  
1 5 10 15

Gln Gly Lys Val Phe Glu Arg Cys Glu Leu Ala Arg Thr Leu Lys Arg  
20 25 30

Leu Gly Met Asp Gly Tyr Arg Gly Ile Ser Leu Ala Asn Trp Met Cys  
35 40 45

Leu Ala Lys Trp Glu Ser Gly Tyr Asn Thr Arg Ala Thr Asn Tyr Asn  
50 55 60

Ala Gly Asp Arg Ser Thr Asp Tyr Gly Ile Phe Gln Ile Asn Ser Arg  
65 70 75 80

Tyr Trp Cys Asn Asp Gly Lys Thr Pro Gly Ala Val Asn Ala Cys His  
85 90 95

Leu Ser Cys Ser Ala Leu Leu Gln Asp Asn Ile Ala Asp Ala Val Ala  
100 105 110

Cys Ala Lys Arg Val Val Arg Asp Pro Gln Gly Ile Arg Ala Trp Val  
115 120 125

Ala Trp Arg Asn Arg Cys Leu Ser Phe Phe Ser Ser Phe Cys Leu Ser  
130 135 140

His Ile Lys Gly Val Gly Ile Lys  
145 150

&lt;210&gt; 220

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 220

Ser Glu Gly Gly Ala Trp Thr Pro Gly Ser Glu Pro Thr Gly Ala Gln  
1 5 10 15

Ala Cys Glu Phe Glu Ala Pro Ser His His Pro Pro Pro Gln Val Val  
20 25 30

Tyr Ile Ala Cys Ser Phe Thr Thr Val Trp Leu Ile Tyr Ser Lys Phe  
35 40 45

Lys Ala Thr Tyr Asp Gly Asn His Asp Thr Phe Arg Val Glu Phe Leu  
 50 55 60

Val Val Pro Thr Ala Ile Leu Ala Phe Leu Val Asn His Asp Phe Thr  
 65 70 75 80

Pro Leu Glu Ile Leu Trp Thr Phe Ser Ile Tyr Leu Glu Ser Val Ala  
 85 90 95

Ile Leu Pro Gln Leu Phe Met Val Ser Lys Thr Gly Glu Ala Glu Thr  
 100 105 110

Ile Thr Ser His Tyr Leu Phe Ala Leu Gly Val Tyr Arg Thr Leu Tyr  
 115 120 125

Leu Phe Asn Trp Ile Trp Arg Tyr His Phe Glu Gly Phe Phe Asp Leu  
 130 135 140

Ile Ala Ile Val Ala Gly Leu Val Gln Thr Val Leu Tyr Cys Asp Phe  
 145 150 155 160

Phe Tyr Leu Tyr Ile Thr Lys Val Leu Lys Gly Lys Lys Leu Ser Leu  
 165 170 175

Pro Ala

<210> 221  
 <211> 183  
 <212> PRT  
 <213> Homo sapien

<400> 221

Leu His Pro Ser Gly Asp Pro Leu Asp Leu Leu His Leu Pro Gly Val  
 1 5 10 15

Ser Gly His Leu Ala Ala Ala Val His Gly Glu Gln Asp Arg Arg Gly  
 20 25 30

Gly Asp His His Gln Pro Leu Leu Val Cys Ala Arg Arg Leu Pro His  
 35 40 45

Ala Leu Ser Leu Gln Leu Asp Leu Ala Leu Pro Phe Arg Gly Leu Leu  
 50 55 60

Arg Pro His Arg His Cys Gly Arg Pro Gly Pro Asp Ser Pro Leu Leu



65					70					75						80
Arg	Phe	Leu	Leu	Pro	Leu	Tyr	His	Gln	Ser	Pro	Lys	Gly	Glu	Glu	Val	
				85					90					95		
Glu	Phe	Ala	Gly	Ile	Ala	Pro	Val	Leu	Ser	Ile	Ser	Leu	Leu	Gly	Ser	
			100					105					110			
Ser	Gly	Arg	Gln	Arg	Lys	Ala	Ala	Glu	Asp	Glu	Glu	Leu	Ser	His	Pro	
		115					120					125				
Gly	Val	Thr	Phe	Leu	Arg	Thr	His	Leu	Leu	Cys	Ser	Pro	Ser	Arg	Leu	
	130					135					140					
Leu	Pro	Gly	Phe	Arg	Gly	Thr	Val	Glu	Asp	Pro	Gly	Leu	Gly	Glu	Leu	
145					150					155					160	
Arg	Thr	Trp	Ala	Val	Cys	Ser	Phe	Leu	Pro	Phe	Arg	Gln	Glu	Lys	Lys	
				165					170					175		
Ile	Phe	Pro	Leu	Phe	Ser	Phe										
			180													
<210>	222															
<211>	742															
<212>	PRT															
<213>	Homo sapien															
<400>	222															
Met	Ala	Asp	Ala	Gly	Ile	Arg	Arg	Val	Val	Pro	Ser	Asp	Leu	Tyr	Pro	
1				5					10					15		
Leu	Val	Leu	Gly	Phe	Leu	Arg	Asp	Asn	Gln	Leu	Ser	Glu	Val	Ala	Asn	
			20					25					30			
Lys	Phe	Ala	Lys	Ala	Thr	Gly	Ala	Thr	Gln	Gln	Asp	Ala	Asn	Ala	Ser	
		35					40					45				
Ser	Leu	Leu	Asp	Ile	Tyr	Ser	Phe	Trp	Leu	Asn	Arg	Ser	Ala	Lys	Val	
	50					55					60					
Pro	Glu	Arg	Lys	Leu	Gln	Ala	Asn	Gly	Pro	Val	Ala	Lys	Lys	Ala	Lys	
65					70					75					80	
Lys	Lys	Ala	Ser	Ser	Ser	Asp	Ser	Glu	Asp	Ser	Ser	Glu	Glu	Glu	Glu	
				85					90					95		

Glu Val Gln Gly Pro Pro Ala Lys Lys Ala Ala Val Pro Ala Lys Arg  
 100 105 110

Val Gly Leu Pro Pro Gly Lys Ala Ala Ala Lys Ala Ser Glu Ser Ser  
 115 120 125

Ser Ser Glu Glu Ser Ser Asp Asp Asp Asp Glu Glu Asp Gln Lys Lys  
 130 135 140

Gln Pro Val Gln Lys Gly Val Lys Pro Gln Ala Lys Ala Ala Lys Ala  
 145 150 155 160

Pro Pro Lys Lys Ala Lys Ser Ser Asp Ser Asp Ser Asp Ser Ser Ser  
 165 170 175

Glu Asp Glu Pro Pro Lys Asn Gln Lys Pro Lys Ile Thr Pro Val Thr  
 180 185 190

Val Lys Ala Gln Thr Lys Ala Pro Pro Lys Pro Ala Arg Ala Ala Pro  
 195 200 205

Lys Ile Ala Asn Gly Lys Ala Ala Ser Ser Ser Ser Ser Ser Ser Ser  
 210 215 220

Ser Ser Ser Ser Asp Asp Ser Glu Glu Glu Lys Ala Ala Ala Thr Pro  
 225 230 235 240

Lys Lys Val Trp Thr Ile Thr Ser Val Arg Ala Glu Val Thr Arg Ala  
 245 250 255

Val Met Cys Val Cys Leu Pro Ser Leu Ala Gly Leu Val Gly Ser Ala  
 260 265 270

Phe Ser Cys Gly Glu Ser Ile Phe Phe Leu Met Gln Thr Val Pro Lys  
 275 280 285

Lys Gln Val Val Ala Lys Ala Pro Val Lys Ala Ala Thr Thr Pro Thr  
 290 295 300

Arg Lys Ser Ser Ser Ser Glu Asp Ser Ser Ser Asp Glu Glu Glu Glu  
 305 310 315 320

Gln Lys Lys Pro Met Lys Asn Lys Pro Gly Pro Tyr Ser Ser Val Pro  
 325 330 335

Pro Pro Ser Ala Pro Pro Pro Lys Lys Ser Leu Gly Thr Gln Pro Pro  
 340 345 350

Lys Lys Ala Val Glu Lys Gln Gln Pro Val Glu Ser Ser Glu Asp Ser  
 355 360 365

Ser Asp Glu Ser Asp Ser Ser Ser Glu Glu Glu Lys Lys Pro Pro Thr  
 370 375 380

Lys Ala Val Val Ser Lys Ala Thr Thr Lys Pro Pro Pro Ala Lys Lys  
 385 390 395 400

Ala Ala Glu Ser Ser Ser Asp Ser Ser Asp Ser Asp Ser Ser Glu Asp  
 405 410 415

Asp Glu Ala Pro Ser Lys Pro Ala Gly Thr Thr Lys Asn Ser Ser Asn  
 420 425 430

Lys Pro Ala Val Thr Thr Lys Ser Pro Ala Val Lys Pro Ala Ala Ala  
 435 440 445

Pro Lys Gln Pro Val Gly Gly Gly Gln Lys Leu Leu Thr Arg Lys Ala  
 450 455 460

Asp Ser Ser Ser Ser Glu Glu Glu Ser Ser Ser Ser Glu Glu Glu Lys  
 465 470 475 480

Thr Lys Lys Met Val Ala Thr Thr Lys Pro Lys Ala Thr Ala Lys Ala  
 485 490 495

Ala Leu Ser Leu Pro Ala Lys Gln Ala Pro Gln Gly Ser Arg Asp Ser  
 500 505 510

Ser Ser Asp Ser Asp Ser Ser Ser Glu Glu Glu Glu Glu Lys Thr  
 515 520 525

Ser Lys Ser Ala Val Lys Lys Lys Pro Gln Lys Val Ala Gly Gly Ala  
 530 535 540

Ala Pro Ser Lys Pro Ala Ser Ala Lys Lys Gly Lys Ala Glu Ser Ser  
 545 550 555 560

Asn Ser Ser Ser Ser Asp Asp Ser Ser Glu Glu Glu Glu Glu Lys Leu  
 565 570 575

Lys Gly Lys Gly Ser Pro Arg Pro Gln Ala Pro Lys Ala Asn Gly Thr

580 585 590  
 Ser Ala Leu Thr Ala Gln Asn Gly Lys Ala Ala Lys Asn Ser Glu Glu  
 595 600 605  
 Glu Glu Glu Glu Lys Lys Lys Ala Ala Val Val Val Ser Lys Ser Gly  
 610 615 620  
 Ser Leu Lys Lys Arg Lys Gln Asn Glu Ala Ala Lys Glu Ala Glu Thr  
 625 630 635 640  
 Pro Gln Ala Lys Lys Ile Lys Leu Gln Thr Pro Asn Thr Phe Pro Lys  
 645 650 655  
 Arg Lys Lys Gly Glu Lys Arg Ala Ser Ser Pro Phe Arg Arg Val Arg  
 660 665 670  
 Glu Glu Glu Ile Glu Val Asp Ser Arg Val Ala Asp Asn Ser Phe Asp  
 675 680 685  
 Ala Lys Arg Gly Ala Ala Gly Asp Trp Gly Glu Arg Ala Asn Gln Val  
 690 695 700  
 Leu Lys Phe Thr Lys Gly Lys Ser Phe Arg His Glu Lys Thr Lys Lys  
 705 710 715 720  
 Lys Arg Gly Ser Tyr Arg Gly Gly Ser Ile Ser Val Gln Val Asn Ser  
 725 730 735  
 Ile Lys Phe Asp Ser Glu  
 740  
 <210> 223  
 <211> 288  
 <212> PRT  
 <213> Homo sapien  
 <400> 223  
 Leu Ser Gly His Leu Leu Leu Lys Gln Ser Gly Pro Thr Gln Pro Glu  
 1 5 10 15  
 Arg Thr Ala Phe Leu Ser Asn Pro Gln Pro Leu Ile Phe Ala Asn Leu  
 20 25 30  
 Lys His Tyr Gln Lys Gln Gln Ser Leu Pro Ser Leu Cys Ser Thr Ser  
 35 40 45

Asp Pro Asp Thr Pro Leu Gly Ala Pro Ser Ser Ser Asp Ser Asp Ser  
 50 55 60

Ser Ser Ser Glu Glu Glu Glu Lys Thr Ser Lys Ser Ala Val Lys  
 65 70 75 80

Lys Lys Pro Gln Lys Val Ala Gly Gly Ala Ala Pro Ser Lys Pro Ala  
 85 90 95

Ser Ala Lys Lys Gly Lys Ala Glu Ser Ser Asn Ser Ser Ser Ser Asp  
 100 105 110

Asp Ser Ser Glu Glu Glu Glu Lys Leu Lys Gly Lys Gly Ser Pro  
 115 120 125

Arg Pro Gln Ala Pro Lys Ala Asn Gly Thr Ser Ala Leu Thr Ala Gln  
 130 135 140

Asn Gly Lys Ala Ala Lys Asn Ser Glu Glu Glu Glu Glu Lys Lys  
 145 150 155 160

Lys Ala Ala Val Val Val Ser Lys Ser Gly Ser Leu Lys Lys Arg Lys  
 165 170 175

Gln Asn Glu Ala Ala Lys Glu Ala Glu Thr Pro Gln Ala Lys Lys Ile  
 180 185 190

Lys Leu Gln Thr Pro Asn Thr Phe Pro Lys Arg Lys Lys Gly Glu Lys  
 195 200 205

Arg Ala Ser Ser Pro Phe Arg Arg Val Arg Glu Glu Glu Ile Glu Val  
 210 215 220

Asp Ser Arg Val Ala Asp Asn Ser Phe Asp Ala Lys Arg Gly Ala Ala  
 225 230 235 240

Gly Asp Trp Gly Glu Arg Ala Asn Gln Val Leu Lys Phe Thr Lys Gly  
 245 250 255

Lys Ser Phe Arg His Glu Lys Thr Lys Lys Lys Arg Gly Ser Tyr Arg  
 260 265 270

Gly Gly Ser Ile Ser Val Gln Val Asn Ser Ile Lys Phe Asp Ser Glu  
 275 280 285

<210> 224  
 <211> 265  
 <212> PRT  
 <213> Homo sapien

<400> .224

Ser Ser Ala Pro Asp Phe Ala Asn Leu Lys His Tyr Gln Lys Gln Gln  
 1 5 10 15

Ser Leu Pro Ser Leu Cys Ser Thr Ser Asp Pro Asp Thr Pro Leu Gly  
 20 25 30

Ala Pro Ser Ser Ser Asp Ser Asp Ser Ser Ser Ser Glu Glu Glu Glu  
 35 40 45

Glu Lys Thr Ser Lys Ser Ala Val Lys Lys Lys Pro Gln Lys Val Ala  
 50 55 60

Gly Gly Ala Ala Pro Ser Lys Pro Ala Ser Ala Lys Lys Gly Lys Ala  
 65 70 75 80

Glu Ser Ser Asn Ser Ser Ser Ser Asp Asp Ser Ser Glu Glu Glu Glu  
 85 90 95

Glu Lys Leu Lys Gly Lys Gly Ser Pro Arg Pro Gln Ala Pro Lys Ala  
 100 105 110

Asn Gly Thr Ser Ala Leu Thr Ala Gln Asn Gly Lys Ala Ala Lys Asn  
 115 120 125

Ser Glu Glu Glu Glu Glu Glu Lys Lys Lys Ala Ala Val Val Val Ser  
 130 135 140

Lys Ser Gly Ser Leu Lys Lys Arg Lys Gln Asn Glu Ala Ala Lys Glu  
 145 150 155 160

Ala Glu Thr Pro Gln Ala Lys Lys Ile Lys Leu Gln Thr Pro Asn Thr  
 165 170 175

Phe Pro Lys Arg Lys Lys Gly Glu Lys Arg Ala Ser Ser Pro Phe Arg  
 180 185 190

Arg Val Arg Glu Glu Glu Ile Glu Val Asp Ser Arg Val Ala Asp Asn  
 195 200 205

Ser Phe Asp Ala Lys Arg Gly Ala Ala Gly Asp Trp Gly Glu Arg Ala  
 210 215 220

Asn Gln Val Leu Lys Phe Thr Lys Gly Lys Ser Phe Arg His Glu Lys  
 225 230 235 240

Thr Lys Lys Lys Arg Gly Ser Tyr Arg Gly Gly Ser Ile Ser Val Gln  
 245 250 255

Val Asn Ser Ile Lys Phe Asp Ser Glu  
 260 265

<210> 225  
 <211> 1276  
 <212> PRT  
 <213> Homo sapien

<400> 225

Met Ile Leu Val Gln Ile Leu Lys Gln Glu Trp Pro Lys His Trp Pro  
 1 5 10 15

Thr Phe Ile Ser Asp Ile Val Gly Ala Ser Arg Thr Ser Glu Ser Leu  
 20 25 30

Cys Gln Asn Asn Met Val Ile Leu Lys Leu Leu Ser Glu Glu Val Phe  
 35 40 45

Asp Phe Ser Ser Gly Gln Ile Thr Gln Val Lys Ser Lys His Leu Lys  
 50 55 60

Asp Ser Met Cys Asn Glu Phe Ser Gln Ile Phe Gln Leu Cys Gln Phe  
 65 70 75 80

Val Met Glu Asn Ser Gln Asn Ala Pro Leu Val His Ala Thr Leu Glu  
 85 90 95

Thr Leu Leu Arg Phe Leu Asn Trp Ile Pro Leu Gly Tyr Ile Phe Glu  
 100 105 110

Thr Lys Leu Ile Ser Thr Leu Ile Tyr Lys Phe Leu Asn Val Pro Met  
 115 120 125

Phe Arg Asn Val Ser Leu Lys Cys Leu Thr Glu Ile Ala Gly Val Ser  
 130 135 140

Val Ser Gln Tyr Glu Glu Gln Phe Val Thr Leu Phe Thr Leu Thr Met  
 145 150 155 160

Met Gln Leu Lys Gln Met Leu Pro Leu Asn Thr Asn Ile Arg Leu Ala  
 165 170 175

Tyr Ser Asn Gly Lys Asp Asp Glu Gln Asn Phe Ile Gln Asn Leu Ser  
 180 185 190

Leu Phe Leu Cys Thr Phe Leu Lys Glu His Asp Gln Leu Ile Glu Lys  
 195 200 205

Arg Leu Asn Leu Arg Glu Thr Leu Met Glu Ala Leu His Tyr Met Leu  
 210 215 220

Leu Val Ser Glu Val Glu Glu Thr Glu Ile Phe Lys Ile Cys Leu Glu  
 225 230 235 240

Tyr Trp Asn His Leu Ala Ala Glu Leu Tyr Arg Glu Ser Pro Phe Ser  
 245 250 255

Thr Ser Ala Ser Pro Leu Leu Ser Gly Ser Gln His Phe Asp Val Pro  
 260 265 270

Pro Arg Arg Gln Leu Tyr Leu Pro Met Leu Phe Lys Val Thr Glu Arg  
 275 280 285

Leu Val Glu Cys Ser Ser Cys Cys Ile Leu Trp Phe Leu Arg Ser Glu  
 290 295 300

Ser Lys Tyr Phe Tyr Ile Cys Val Asn Lys Leu Ala Ile Lys Arg Glu  
 305 310 315 320

Pro Asn Asn Phe Ser Met Ser Val Glu Asn Gln Asn Met Lys Gly Val  
 325 330 335

Glu Ser Arg Thr Leu Ile Leu Lys Ser Val Val Leu Leu Ser Val Ser  
 340 345 350

Thr Leu Val Val Ile Ser Leu Gly Lys Phe Ile Ala Thr Cys Gln Ser  
 355 360 365

Thr Lys Pro Glu Ser Arg Asn Glu Thr Gln Glu Thr Pro Val Thr Glu  
 370 375 380

Val Gly Glu Lys Asn His Ile Lys Thr His Leu Asn Asn Tyr Lys Ala  
 385 390 395 400

Ile Phe Val Glu Leu Gln Trp Lys Lys Asn Phe Phe Phe Trp Arg Gln



405	410	415
Gly Leu Ala Leu Trp Leu Arg Leu Glu Cys Ser Gly Val Val Ile Ala		
420	425	430
His Tyr Asn Leu Glu Leu Leu Asp Tyr Lys Gln Phe Ser Cys Val Ser		
435	440	445
Leu Pro Ser Asn Trp Leu Gln Ala His Thr Thr Met Pro Glu Gln Ile		
450	455	460
Leu Asn Phe Leu Val Leu Leu His Leu Tyr Leu His Ser Phe Phe Cys		
465	470	475
480		
Cys Ala Leu Ser Pro Ser Ile Phe Ile Val Leu Glu Ile Gly Cys His		
485	490	495
Phe Val Leu Leu Lys Leu Leu Ser Asn Ser Trp Pro Gln Gln Phe Phe		
500	505	510
Leu Pro Arg Pro Ser Gly Ile Val Gly Ile Ile Gly Met Asn Pro Tyr		
515	520	525
Thr Trp Leu Ala Cys Gly Phe Phe Gly Phe Val Cys Phe Glu Leu Ser		
530	535	540
Phe Tyr Thr Asn Asp Phe Ser Asp Leu Thr Ile Phe Phe Leu Ile Asp		
545	550	555
560		
Ile Leu Leu Ser Met Val Arg Leu Leu Met Val Ser Arg Met Ala Lys		
565	570	575
Pro Glu Glu Val Leu Val Val Glu Asn Asp Gln Gly Glu Val Val Arg		
580	585	590
Glu Phe Met Lys Asp Thr Asp Ser Ile Asn Leu Tyr Lys Asn Met Arg		
595	600	605
Glu Thr Leu Gly Lys Leu Ile Asn Thr Val Asn Leu Tyr Leu Tyr Lys		
610	615	620
Ser Ile Leu Gly Trp Lys Tyr Ile Leu Gly Asn Val Leu Val Val Ser		
625	630	635
640		
Lys Tyr Phe Leu Asn Val Leu Leu Leu Ile Asn Lys Ile Leu Leu Ile		
645	650	655

Ile Ala Phe Glu Thr Met Phe Phe Phe Val Val Tyr Leu Thr His Leu  
 660 665 670

Asp Tyr Val Asp Thr Glu Arg Ile Met Thr Glu Lys Leu His Asn Gln  
 675 680 685

Val Asn Gly Thr Glu Trp Ser Trp Lys Asn Leu Asn Thr Leu Cys Trp  
 690 695 700

Ala Ile Gly Ser Ile Ser Gly Ala Met His Glu Glu Asp Glu Lys Arg  
 705 710 715 720

Phe Leu Val Thr Val Ile Lys Asp Leu Leu Gly Leu Cys Glu Gln Lys  
 725 730 735

Arg Gly Lys Asp Asn Lys Ala Ile Ile Ala Ser Asn Ile Met Tyr Ile  
 740 745 750

Val Gly Gln Tyr Pro Arg Phe Leu Arg Ala His Trp Lys Phe Leu Lys  
 755 760 765

Thr Val Val Asn Lys Leu Phe Glu Phe Met His Glu Thr His Asp Gly  
 770 775 780

Val Gln Asp Met Ala Cys Asp Thr Phe Ile Lys Ile Ala Gln Lys Cys  
 785 790 795 800

Arg Arg His Phe Val Gln Val Gln Val Gly Glu Val Met Pro Phe Ile  
 805 810 815

Asp Glu Ile Leu Asn Asn Ile Asn Thr Ile Ile Cys Asp Leu Gln Pro  
 820 825 830

Gln Gln Val His Thr Phe Tyr Glu Ala Val Gly Tyr Met Ile Gly Ala  
 835 840 845

Gln Thr Asp Gln Thr Val Gln Glu His Leu Ile Glu Lys Tyr Met Leu  
 850 855 860

Leu Pro Asn Gln Val Trp Asp Ser Ile Ile Gln Gln Ala Thr Lys Asn  
 865 870 875 880

Val Asp Ile Leu Lys Asp Pro Glu Thr Val Lys Gln Leu Gly Ser Ile  
 885 890 895

Leu Lys Thr Asn Val Arg Ala Cys Lys Ala Val Gly His Pro Phe Val  
 900 905 910

Ile Gln Leu Gly Arg Ile Tyr Leu Asp Met Leu Asn Val Tyr Lys Cys  
 915 920 925

Leu Ser Glu Asn Ile Ser Ala Ala Ile Gln Ala Asn Gly Glu Met Val  
 930 935 940

Thr Lys Gln Pro Leu Ile Arg Ser Met Arg Thr Val Lys Arg Glu Thr  
 945 950 955 960

Leu Lys Leu Ile Ser Gly Trp Val Ser Arg Ser Asn Asp Pro Gln Met  
 965 970 975

Val Ala Glu Asn Phe Val Pro Pro Leu Leu Asp Ala Val Leu Ile Asp  
 980 985 990

Tyr Gln Arg Asn Val Pro Ala Ala Arg Glu Pro Glu Val Leu Ser Thr  
 995 1000 1005

Met Ala Ile Ile Val Asn Lys Leu Gly Gly His Ile Thr Ala Glu  
 1010 1015 1020

Ile Pro Gln Ile Phe Asp Ala Val Phe Glu Cys Thr Leu Asn Met  
 1025 1030 1035

Ile Asn Lys Asp Phe Glu Glu Tyr Pro Glu His Arg Thr Asn Phe  
 1040 1045 1050

Phe Leu Leu Leu Gln Ala Val Asn Ser His Cys Phe Pro Ala Phe  
 1055 1060 1065

Leu Ala Ile Pro Pro Thr Gln Phe Lys Leu Val Leu Asp Ser Ile  
 1070 1075 1080

Ile Trp Ala Phe Lys His Thr Met Arg Asn Val Ala Asp Thr Gly  
 1085 1090 1095

Leu Gln Ile Leu Phe Thr Leu Leu Gln Asn Val Ala Gln Glu Glu  
 1100 1105 1110

Ala Ala Ala Gln Ser Phe Tyr Gln Thr Tyr Phe Cys Asp Ile Leu  
 1115 1120 1125

Gln His Ile Phe Ser Val Val Thr Asp Thr Ser His Thr Ala Gly  
1130 1135 1140

Leu Thr Met His Ala Ser Ile Leu Ala Tyr Met Phe Asn Leu Val  
1145 1150 1155

Glu Glu Gly Lys Ile Ser Thr Ser Leu Asn Pro Gly Asn Pro Val  
1160 1165 1170

Asn Asn Gln Ile Phe Leu Gln Glu Tyr Val Ala Asn Leu Leu Lys  
1175 1180 1185

Ser Ala Phe Pro His Leu Gln Asp Ala Gln Val Lys Leu Phe Val  
1190 1195 1200

Thr Gly Leu Phe Ser Leu Asn Gln Asp Ile Pro Ala Phe Lys Glu  
1205 1210 1215

His Leu Arg Asp Phe Leu Val Gln Ile Lys Glu Phe Ala Gly Glu  
1220 1225 1230

Asp Thr Ser Asp Leu Phe Leu Glu Glu Arg Glu Ile Ala Leu Arg  
1235 1240 1245

Gln Ala Asp Glu Glu Lys His Lys Arg Gln Met Ser Val Pro Gly  
1250 1255 1260

Ile Phe Asn Pro His Glu Ile Pro Glu Glu Met Cys Asp  
1265 1270 1275

<210> 226  
<211> 632  
<212> PRT  
<213> Homo sapien

<400> 226

Met Tyr Cys Tyr Ser Ser Ile Lys Phe Cys Ser Leu Phe Ala Phe Glu  
1 5 10 15

Thr Met Phe Phe Phe Val Val Tyr Leu Thr His Leu Asp Tyr Val Asp  
20 25 30

Thr Glu Arg Ile Met Thr Glu Lys Leu His Asn Gln Val Asn Gly Thr  
35 40 45

Glu Trp Ser Trp Lys Asn Leu Asn Thr Leu Cys Trp Ala Ile Gly Ser  
50 55 60

Ile Ser Gly Ala Met His Glu Glu Asp Glu Lys Arg Phe Leu Val Thr  
 65 70 75 80  
 Val Ile Lys Asp Leu Leu Gly Leu Cys Glu Gln Lys Arg Gly Lys Asp  
 85 90 95  
 Asn Lys Ala Ile Ile Ala Ser Asn Ile Met Tyr Ile Val Gly Gln Tyr  
 100 105 110  
 Pro Arg Phe Leu Arg Ala His Trp Lys Phe Leu Lys Thr Val Val Asn  
 115 120 125  
 Lys Leu Phe Glu Phe Met His Glu Thr His Asp Gly Val Gln Asp Met  
 130 135 140  
 Ala Cys Asp Thr Phe Ile Lys Ile Ala Gln Lys Cys Arg Arg His Phe  
 145 150 155 160  
 Val Gln Val Gln Val Gly Glu Val Met Pro Phe Ile Asp Glu Ile Leu  
 165 170 175  
 Asn Asn Ile Asn Thr Ile Ile Cys Asp Leu Gln Pro Gln Gln Val His  
 180 185 190  
 Thr Phe Tyr Glu Ala Val Gly Tyr Met Ile Gly Ala Gln Thr Asp Gln  
 195 200 205  
 Thr Val Gln Glu His Leu Ile Glu Lys Tyr Met Leu Leu Pro Asn Gln  
 210 215 220  
 Val Trp Asp Ser Ile Ile Gln Gln Ala Thr Lys Asn Val Asp Ile Leu  
 225 230 235 240  
 Lys Asp Pro Glu Thr Val Lys Gln Leu Gly Ser Ile Leu Lys Thr Asn  
 245 250 255  
 Val Arg Ala Cys Lys Ala Val Gly His Pro Phe Val Ile Gln Leu Gly  
 260 265 270  
 Arg Ile Tyr Leu Asp Met Leu Asn Val Tyr Lys Cys Leu Ser Glu Asn  
 275 280 285  
 Ile Ser Ala Ala Ile Gln Ala Asn Gly Glu Met Val Thr Lys Gln Pro  
 290 295 300

Leu Ile Arg Ser Met Arg Thr Val Lys Arg Glu Thr Leu Lys Leu Ile  
 305 310 315 320

Ser Gly Trp Val Ser Arg Ser Asn Asp Pro Gln Met Val Ala Glu Asn  
 325 330 335

Phe Val Pro Pro Leu Leu Asp Ala Val Leu Ile Asp Tyr Gln Arg Asn  
 340 345 350

Val Pro Ala Ala Arg Glu Pro Glu Val Leu Ser Thr Met Ala Ile Ile  
 355 360 365

Val Asn Lys Leu Gly Gly His Ile Thr Ala Glu Ile Pro Gln Ile Phe  
 370 375 380

Asp Ala Val Phe Glu Cys Thr Leu Asn Met Ile Asn Lys Asp Phe Glu  
 385 390 395 400

Glu Tyr Pro Glu His Arg Thr Asn Phe Phe Leu Leu Leu Gln Ala Val  
 405 410 415

Asn Ser His Cys Phe Pro Ala Phe Leu Ala Ile Pro Pro Thr Gln Phe  
 420 425 430

Lys Leu Val Leu Asp Ser Ile Ile Trp Ala Phe Lys His Thr Met Arg  
 435 440 445

Asn Val Ala Asp Thr Gly Leu Gln Ile Leu Phe Thr Leu Leu Gln Asn  
 450 455 460

Val Ala Gln Glu Glu Ala Ala Ala Gln Ser Phe Tyr Gln Thr Tyr Phe  
 465 470 475 480

Cys Asp Ile Leu Gln His Ile Phe Ser Val Val Thr Asp Thr Ser His  
 485 490 495

Thr Ala Gly Leu Thr Met His Ala Ser Ile Leu Ala Tyr Met Phe Asn  
 500 505 510

Leu Val Glu Glu Gly Lys Ile Ser Thr Ser Leu Asn Pro Gly Asn Pro  
 515 520 525

Val Asn Asn Gln Ile Phe Leu Gln Glu Tyr Val Ala Asn Leu Leu Lys  
 530 535 540

Ser Ala Phe Pro His Leu Gln Asp Ala Gln Val Lys Leu Phe Val Thr  
 545 550 555 560

Gly Leu Phe Ser Leu Asn Gln Asp Ile Pro Ala Phe Lys Glu His Leu  
 565 570 575

Arg Asp Phe Leu Val Gln Ile Lys Glu Phe Ala Gly Glu Asp Thr Ser  
 580 585 590

Asp Leu Phe Leu Glu Glu Arg Glu Ile Ala Leu Arg Gln Ala Asp Glu  
 595 600 605

Glu Lys His Lys Arg Gln Met Ser Val Pro Gly Ile Phe Asn Pro His  
 610 615 620

Glu Ile Pro Glu Glu Met Cys Asp  
 625 630

<210> 227  
 <211> 159  
 <212> PRT  
 <213> Homo sapien

<400> 227

Met Glu Leu His Tyr Leu Thr His Phe Gln Ile Pro Asp Arg Ile Ser  
 1 5 10 15

Thr Val Arg Arg Phe Thr Leu Leu Leu Ser Phe Leu Leu Arg Arg Leu  
 20 25 30

Val Thr Leu Ile Ser Gln Gln Ala Thr Leu Leu Ala Ser Asn Glu Ala  
 35 40 45

Phe Lys Lys Gln Ala Glu Ser Ala Ser Glu Ala Ala Lys Lys Tyr Met  
 50 55 60

Glu Glu Asn Asp Gln Leu Lys Lys Gly Ala Ala Val Asp Gly Gly Lys  
 65 70 75 80

Leu Asp Val Gly Asn Ala Glu Val Lys Leu Glu Glu Glu Asn Arg Ser  
 85 90 95

Leu Lys Ala Asp Leu Gln Lys Leu Lys Asp Glu Leu Ala Ser Thr Lys  
 100 105 110

Gln Lys Leu Glu Lys Ala Glu Asn Gln Val Leu Ala Met Arg Lys Gln  
 115 120 125

Ser Glu Gly Leu Thr Lys Glu Tyr Asp Arg Leu Leu Glu Glu His Ala  
 130 135 140

Lys Leu Gln Ala Ala Val Asp Gly Pro Met Asp Lys Lys Glu Glu  
 145 150 155

<210> 228  
 <211> 313  
 <212> PRT  
 <213> Homo sapien

<400> 228

Met Gly Ala Glu Ala Ser Ser Ser Trp Cys Pro Gly Thr Ala Leu Pro  
 1 5 10 15

Glu Glu Arg Leu Ser Val Lys Arg Ala Ser Glu Ile Ser Gly Phe Leu  
 20 25 30

Gly Gln Gly Ser Ser Gly Glu Ala Ala Leu Asp Val Leu Thr His Val  
 35 40 45

Leu Glu Gly Ala Gly Asn Lys Leu Thr Ser Ser Cys Gly Lys Pro Ser  
 50 55 60

Ser Asn Arg Met Ser Leu Gln Trp Thr Ala Val Ala Thr Phe Leu Tyr  
 65 70 75 80

Ala Glu Val Phe Val Val Leu Leu Leu Cys Ile Pro Phe Ile Ser Pro  
 85 90 95

Lys Arg Trp Gln Lys Ile Phe Lys Ser Arg Leu Val Glu Leu Leu Val  
 100 105 110

Ser Tyr Gly Asn Thr Phe Phe Val Val Leu Ile Val Ile Leu Val Leu  
 115 120 125

Leu Val Ile Asp Ala Val Arg Glu Ile Arg Lys Tyr Asp Asp Val Thr  
 130 135 140

Glu Lys Val Asn Leu Gln Asn Asn Pro Gly Ala Met Glu His Phe His  
 145 150 155 160

Met Lys Leu Phe Arg Ala Gln Arg Asn Leu Tyr Ile Ala Gly Phe Ser  
 165 170 175



Leu Leu Leu Ser Phe Leu Leu Arg Arg Leu Val Thr Leu Ile Ser Gln  
 180 185 190

Gln Ala Thr Leu Leu Ala Ser Asn Glu Ala Phe Lys Lys Gln Ala Glu  
 195 200 205

Ser Ala Ser Glu Ala Ala Lys Lys Tyr Met Glu Glu Asn Asp Gln Leu  
 210 215 220

Lys Lys Gly Ala Ala Val Asp Gly Gly Lys Leu Asp Val Gly Asn Ala  
 225 230 235 240

Glu Val Lys Leu Glu Glu Glu Asn Arg Ser Leu Lys Ala Asp Leu Gln  
 245 250 255

Lys Leu Lys Asp Glu Leu Ala Ser Thr Lys Gln Lys Leu Glu Lys Ala  
 260 265 270

Glu Asn Gln Val Leu Ala Met Arg Lys Gln Ser Glu Gly Leu Thr Lys  
 275 280 285

Glu Tyr Asp Arg Leu Leu Glu Glu His Ala Lys Leu Gln Ala Ala Val  
 290 295 300

Asp Gly Pro Met Asp Lys Lys Glu Glu  
 305 310

<210> 229  
 <211> 301  
 <212> PRT  
 <213> Homo sapien

<400> 229

Met Ser Leu Gln Trp Thr Ala Val Ala Thr Phe Leu Tyr Ala Glu Val  
 1 5 10 15

Phe Val Val Leu Leu Leu Cys Ile Pro Phe Ile Ser Pro Lys Arg Trp  
 20 25 30

Gln Lys Ile Phe Lys Ser Arg Leu Val Glu Leu Leu Val Ser Tyr Gly  
 35 40 45

Asn Thr Phe Phe Val Val Leu Ile Val Ile Leu Val Leu Leu Val Ile  
 50 55 60

Asp Ala Val Arg Glu Ile Arg Lys Tyr Asp Asp Val Thr Glu Lys Val  
 65 70 75 80

Asn Leu Gln Asn Asn Pro Gly Ala Met Glu His Phe His Met Lys Leu  
 85 90 95  
 Phe Arg Ala Gln Arg Asn Leu Tyr Ile Ala Gly Phe Ser Leu Leu Leu  
 100 105 110  
 Ser Phe Leu Leu Arg Arg Leu Val Thr Leu Ile Ser Gln Gln Ala Thr  
 115 120 125  
 Leu Leu Ala Ser Asn Glu Ala Phe Lys Lys Gln Ala Glu Ser Ala Ser  
 130 135 140  
 Glu Ala Ala Lys Lys Tyr Met Glu Glu Asn Asp Gln Leu Lys Lys Gly  
 145 150 155 160  
 Ala Ala Val Asp Gly Gly Lys Leu Asp Val Gly Asn Ala Glu Val Lys  
 165 170 175  
 Leu Glu Glu Glu Asn Arg Ser Leu Lys Ala Asp Leu Gln Lys Leu Lys  
 180 185 190  
 Asp Glu Leu Ala Ser Thr Lys Gln Lys Leu Glu Lys Ala Glu Asn Gln  
 195 200 205  
 Val Leu Ala Met Arg Lys Gln Ser Glu Gly Leu Thr Lys Glu Tyr Asp  
 210 215 220  
 Arg Leu Leu Glu Glu His Ala Lys Leu Gln Ser Pro Ala Ser Pro Ser  
 225 230 235 240  
 Ser Thr Ser Val Cys Ala Leu Leu Leu Pro Pro Phe Pro Ser Thr Ala  
 245 250 255  
 His Ser Ser Ser Ser Arg Pro Leu Ser Thr Leu Ser Lys His Ile Thr  
 260 265 270  
 Gly Asp Leu Ile Ala Thr Arg Ser Glu Cys Val Cys Cys His Pro Ala  
 275 280 285  
 Trp Pro Gly Gln Ala Trp His Ser Leu Gly Phe His Ala  
 290 295 300

&lt;210&gt; 230

&lt;211&gt; 98

&lt;212&gt; PRT

<213> Homo sapien

<220>

<221> MISC\_FEATURE

<222> (2)..(2)

<223> X=any amino acid

<220>

<221> MISC\_FEATURE

<222> (25)..(25)

<223> X=any amino acid

<220>

<221> MISC\_FEATURE

<222> (29)..(29)

<223> X=any amino acid

<220>

<221> MISC\_FEATURE

<222> (68)..(68)

<223> X=any amino acid

<220>

<221> MISC\_FEATURE

<222> (73)..(73)

<223> X=any amino acid

<400> 230

Ile	Xaa	Ser	Pro	Phe	Ser	Tyr	Thr	Pro	Pro	Phe	Pro	Pro	Thr	Gly	Gly
1				5					10					15	

Ala	Ala	Leu	Ser	Ala	Arg	Gly	Ile	Xaa	Gly	Pro	Glu	Xaa	Glu	Pro	Ala
		20						25					30		

Ala	Ala	Ala	Val	Ala	Arg	Gly	Lys	Arg	Glu	Glu	Ala	Ala	Thr	Gly	Glu
		35					40					45			

Lys	Lys	Arg	Ser	Arg	His	Arg	Arg	Glu	Val	Asp	Thr	Gln	Ala	Ala	Ala
	50					55					60				

Ala	Ala	Arg	Xaa	Ala	Arg	Pro	Pro	Xaa	Arg	Pro	Ser	Pro	Arg	Pro	Val
65					70					75					80

His	Lys	Ala	Ala	Arg	Leu	Arg	Lys	Gly	Val	Arg	Thr	Lys	Gly	Gln	Ser
					85				90					95	

Leu Gln

<210> 231  
 <211> 130  
 <212> PRT  
 <213> Homo sapien

<220>  
 <221> MISC\_FEATURE  
 <222> (2)..(2)  
 <223> X=any amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (4)..(4)  
 <223> X=any amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (25)..(25)  
 <223> X=any amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (29)..(29)  
 <223> X=any amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (67)..(67)  
 <223> X=any amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (73)..(73)  
 <223> X=any amino acid

<220>  
 <221> MISC\_FEATURE  
 <222> (128)..(128)  
 <223> X=any amino acid

<400> 231

Phe Xaa Pro Xaa Phe Pro Thr Pro Pro Pro Ser Pro Arg Pro Glu Glu  
 1 5 10 15

Pro Leu Phe Pro Arg Gly Ala Phe Xaa Gly Pro Arg Xaa Ser Pro Pro  
 20 25 30

Pro Pro Pro Ser Pro Glu Gly Ser Glu Lys Arg Pro Arg Pro Glu Arg  
 35 40 45

Lys Ser Gly Val Ala Thr Gly Glu Lys Ser Thr Pro Lys Gln Gln Pro  
50 55 60

Pro Pro Xaa Arg Pro Ala His Gln Xaa Ala Arg Pro Pro Ala Pro Ser  
65 70 75 80

Thr Lys Gln Pro Ala Ser Ala Lys Gly Tyr Glu Arg Arg Asp Lys Val  
85 90 95

Ser Asn Glu Lys Ser Val Glu Asp Arg Lys Glu Val Lys Glu Lys Lys  
100 105 110

Glu Lys Thr Lys Gln Thr Ile Ser Cys Pro Gly Gly Ser Glu Lys Xaa  
115 120 125

Lys His  
130

<210> 232  
<211> 260  
<212> PRT  
<213> Homo sapien

<400> 232

Met Asp Met Ser Leu Glu Leu Asp Ile Ile Lys Leu Asn Arg Ser Gln  
1 5 10 15

Arg Gly Gly Trp Gly Gly Cys Arg Gly Leu Arg Ala Val Cys Arg Leu  
20 25 30

Pro Val Ala Gly Arg Val Trp Trp Val Leu Gln Ala Ala Ala Gln Val  
35 40 45

Asn Arg Gly Gly Gly Pro Ile Arg Asn Arg Pro Gly Ile Ala Leu Arg  
50 55 60

Ala Ala Val Glu Gly Gly Arg Asn Arg Pro Ala Pro Tyr Ser Arg Pro  
65 70 75 80

Lys Gln Leu Pro Asp Lys Trp Gln His Asp Leu Phe Asp Ser Gly Phe  
85 90 95

Gly Gly Gly Ala Gly Val Glu Thr Gly Gly Lys Leu Cys Val Val Ser  
100 105 110

Asn Leu Asp Ile Gly Val Ser Asp Ala Asp Ile Gln Glu Leu Phe Ala

115 120 125

Glu Phe Gly Thr Leu Lys Lys Ala Ala Val His Tyr Asp Arg Ser Gly  
130 135 140

Arg Ser Leu Gly Thr Ala Asp Val His Phe Glu Arg Lys Ala Asp Ala  
145 150 155 160

Leu Lys Ala Met Lys Gln Tyr Asn Gly Val Pro Leu Asp Gly Arg Pro  
165 170 175

Met Asn Ile Gln Leu Val Thr Ser Gln Ile Asp Ala Gln Arg Arg Pro  
180 185 190

Ala Gln Ser Val Asn Arg Gly Gly Met Thr Arg Asn Arg Gly Ala Gly  
195 200 205

Gly Met Gly Glu Leu Val Glu Ala Pro Arg Arg Arg His Cys Ser Asp  
210 215 220

Gly Phe Cys Gly Arg Gly Arg Gly Ala Gly Arg Asn Ser Lys Gln Gln  
225 230 235 240

Leu Ser Ala Glu Glu Leu Asp Ala Gln Leu Asp Ala Tyr Asn Ala Arg  
245 250 255

Met Asp Thr Ser  
260

<210> 233  
<211> 243  
<212> PRT  
<213> Homo sapien

<220>  
<221> MISC\_FEATURE  
<222> (28)..(28)  
<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (34)..(34)  
<223> X=any amino acid

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 <223> X=any amino acid

<400> 233

Thr Glu Pro Glu Pro Ala Arg Arg Leu Gly Arg Val Pro Gly Pro Ala  
 1 5 10 15

Cys Arg Val Pro Ala Pro Ser Cys Gly Pro Arg Xaa Trp Gly Ala Ala  
 20 25 30

Ala Xaa Val Asn Arg Gly Gly Gly Pro Ser Gly Thr Gly Arg Xaa Ser  
 35 40 45

Pro Ala Ala Pro Gly Xaa Arg Gln Glu Pro Thr Gly Ala Leu Gln Gln  
 50 55 60

Ala Lys Thr Thr Ser Arg Gln Val Ala Ala Arg Ser Phe Arg Gln Trp  
 65 70 75 80

Leu Arg Arg Trp Cys Arg Arg Gly Asp Arg Trp Glu Thr Val Arg Gly  
 85 90 95

Val His Leu Asp Xaa Gly Val Ser Asp Ala Asp Ile Gln Glu Leu Phe  
 100 105 110

Ala Glu Phe Gly Thr Leu Lys Lys Ala Ala Val His Tyr Asp Arg Ser  
 115 120 125

Gly Arg Ser Leu Gly Thr Ala Asp Val His Phe Glu Arg Lys Ala Asp  
 130 135 140

Ala Leu Lys Ala Met Lys Gln Tyr Asn Gly Val Pro Leu Asp Gly Arg  
 145 150 155 160

Pro Met Asn Ile Gln Leu Val Thr Ser Gln Ile Asp Ala Gln Arg Arg  
 165 170 175

Pro Ala Gln Ser Val Asn Arg Gly Gly Met Thr Arg Asn Arg Gly Ala  
 180 185 190

Gly Gly Ile Gly Gly Asp Gly Gly Thr Arg Arg Gly Asn Ala Arg Ile  
 195 200 205

Leu Cys Gly Arg Gly Arg Gly Ala Gly Arg Asn Ser Lys Gln Gln Leu  
 210 215 220

Ser Ala Glu Glu Leu Asp Ala Gln Leu Asp Ala Tyr Asn Ala Arg Met  
 225 230 235 240

Asp Thr Ser

<210> 234  
 <211> 428  
 <212> PRT  
 <213> Homo sapien

<400> 234

Met Thr Val Ala Glu Ile Lys Gly Thr Thr Gly Arg Thr Tyr Val Gly  
 1 5 10 15

Ser His Ala Gln Gly Arg Ser Ser Lys Cys Leu Lys Lys Thr Lys Thr  
 20 25 30

Glu Asn Pro Thr Asp Pro His Gln Thr Arg Trp Thr Arg Ser Gly Gln  
 35 40 45

Arg Leu His Arg Gly Thr Gln Ser Val Arg Gln His Ala Trp Ser Met  
 50 55 60

His Gly Pro Lys Ser Lys Asn Ala Lys His Ser Met Asp Gln His Thr  
 65 70 75 80

His Gly Gln Cys His Val Asp Ile Val Thr Arg Cys Met Phe Ile Cys  
 85 90 95

Thr Gly Gln Thr Val Thr Gly His His Pro Thr Ser Thr Ala Ala Glu  
 100 105 110

Thr Ser Met Glu Met Ile Asn Ser Val Arg Ala Thr Val Ala Gln Arg  
 115 120 125

Glu Ser Met Cys His Leu Arg Glu Ala Ala Tyr Thr Val Val Pro Thr  
 130 135 140



Gly Ile Ala His His Val Leu Ala Leu Asp Glu Ser Lys Ala Lys Leu  
 145 150 155 160

Ser Ser Asp Val Leu Thr Leu Leu Ile Lys Gln Tyr Cys Arg Glu Ser  
 165 170 175

Gly Val Arg Asn Leu Gln Lys Gln Val Glu Lys Val Leu Arg Lys Ser  
 180 185 190

Ala Tyr Lys Ile Val Ser Gly Glu Ala Glu Ser Val Glu Val Thr Pro  
 195 200 205

Glu Asn Leu Gln Asp Phe Val Gly Lys Pro Val Phe Thr Val Glu Arg  
 210 215 220

Met Tyr Asp Val Thr Pro Pro Gly Val Val Met Gly Leu Ala Trp Thr  
 225 230 235 240

Ala Met Gly Gly Ser Thr Leu Phe Val Glu Thr Ser Leu Arg Arg Pro  
 245 250 255

Gln Asp Lys Asp Ala Lys Gly Asp Lys Asp Gly Ser Leu Glu Val Thr  
 260 265 270

Gly Gln Leu Gly Glu Val Met Lys Glu Ser Ala Arg Ile Ala Tyr Thr  
 275 280 285

Phe Ala Arg Ala Phe Leu Met Gln His Ala Pro Ala Asn Asp Tyr Leu  
 290 295 300

Val Thr Ser His Ile His Leu His Val Pro Glu Gly Ala Thr Pro Lys  
 305 310 315 320

Asp Gly Pro Ser Ala Gly Cys Thr Ile Val Thr Ala Leu Leu Ser Leu  
 325 330 335

Ala Met Gly Arg Pro Val Arg Gln Asn Leu Ala Met Thr Gly Glu Val  
 340 345 350

Ser Leu Thr Gly Lys Ile Leu Pro Val Gly Gly Ile Lys Glu Lys Thr  
 355 360 365

Ile Ala Ala Lys Arg Ala Gly Val Thr Cys Ile Val Leu Pro Ala Glu  
 370 375 380

Asn Lys Lys Asp Phe Tyr Asp Leu Ala Ala Phe Ile Thr Glu Gly Leu





Glu Thr Gln Leu Gly Gly Glu Arg Tyr Asn Leu Phe Asp Trp Leu Pro  
85 90 95

Gln Ala Lys Thr Cys Thr Phe Ile Leu Arg Gly Gly Thr Glu Gln Phe  
100 105 110

Met Glu Glu Thr Glu Arg Ser Leu His Asp Ala Ile Met Ile Val Met  
115 120 125

Arg Ala Ile Lys Asn Asp Ser Val Val Ala Gly Gly Gly Ala Ile Glu  
130 135 140

Met Glu Leu Ser Lys Tyr Leu Arg Asp Tyr Ser Arg Thr Ile Pro Gly  
145 150 155 160

Lys Gln Gln Leu Leu Ile Gly Ala Tyr Ala Lys Ala Leu Glu Ile Ile  
165 170 175

Pro Arg Gln Leu Cys Asp Asn Ala Gly Phe Asp Ala Thr Asn Ile Leu  
180 185 190

Asn Lys Leu Arg Ala Arg His Ala Gln Gly Gly Thr Trp Tyr Gly Val  
195 200 205

Asp Ile Asn Asn Glu Asp Ile Ala Asp Asn Phe Glu Ala Phe Val Trp  
210 215 220

Glu Pro Ala Met Val Arg Ile Asn Ala Leu Thr Ala Ala Ser Glu Ala  
225 230 235 240

Ala Val Pro Asp Arg Val Leu  
245

<210> 237  
<211> 154  
<212> PRT  
<213> Homo sapien

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<223> X=any amino acid

&lt;400&gt; 237

Leu Leu Pro Gln Ala Lys Thr Cys Thr Phe Ile Leu Arg Gly Gly Thr  
1 5 10 15

Glu Gln Phe Met Glu Glu Thr Glu Arg Ser Leu His Asp Ala Ile Met  
20 25 30

Ile Val Xaa Arg Ala Ile Lys Asn Asp Ser Val Val Ala Gly Gly Gly  
35 40 45

Ala Ile Xaa Met Glu Leu Ser Lys Tyr Leu Arg Asp Tyr Ser Arg Thr  
50 55 60

Ile Pro Gly Lys Gln Gln Leu Leu Ile Gly Ala Tyr Ala Lys Ala Leu  
65 70 75 80

Glu Ile Ile Pro Arg Gln Leu Cys Asp Asn Ala Gly Phe Asp Ala Thr  
85 90 95

Asn Ile Leu Asn Lys Leu Arg Ala Arg His Ala Gln Gly Gly Thr Trp  
100 105 110

Tyr Gly Val Asp Ile Asn Asn Glu Asp Ile Ala Asp Asn Phe Glu Ala  
115 120 125

Phe Val Trp Glu Pro Ala Met Val Arg Ile Asn Ala Leu Thr Ala Ala  
130 135 140

Ser Glu Ala Ala Val Pro Asp Arg Val Leu  
145 150

&lt;210&gt; 238

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;220&gt;

&lt;221&gt; MISC\_FEATURE

&lt;222&gt; (18)..(18)

&lt;223&gt; X=any amino acid

&lt;220&gt;

&lt;221&gt; MISC\_FEATURE

&lt;222&gt; (27)..(27)

&lt;223&gt; X=any amino acid

&lt;220&gt;

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

<220>  
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<223> X=any amino acid

<400> 238

Met Ala Met Asp Leu Cys Arg Gln Asp Pro Glu Cys Glu Phe Tyr Phe  
1 5 10 15

Ser Xaa Asp Ala Asp Ala Val Leu Thr Asn Xaa Gln Thr Leu Xaa Xaa  
20 25 30

Leu Ile Glu Glu Xaa Arg Gly Val Xaa Ala Pro Met Xaa Xaa Xaa Xaa  
35 40 45

Gly Lys Xaa Trp Ser Asn Xaa Trp Gly Xaa Leu Ser Xaa Asp Glu Tyr  
50 55 60

Tyr Ala Arg Ser Xaa Asp Xaa Val Glu Leu Val Xaa Arg Lys Asp Val  
65 70 75 80

Gly Val Trp Asn Val Pro Tyr Ile Xaa Xaa Ala Tyr Val Xaa Gly Gly  
85 90 95

Asp Thr Xaa Xaa Met Glu Leu Pro Gln Arg Asp Val Phe Ser Gly Ser  
100 105 110

Asp Xaa Asp Xaa Asp Met Ala Phe Cys Glu Xaa Phe Gly Xaa Lys Gly  
115 120 125

Ile Phe Xaa His Leu Ser Tyr Gln His Glu Phe Gly Arg Leu Leu Ala  
130 135 140

Thr Ser Arg Tyr Asp Thr Glu His Leu His Pro Asp Leu Trp Gln Ile  
145 150 155 160

Phe Asp Asn Pro Val Asp Trp Lys Glu Gln Tyr Ile His Glu Asn Tyr  
165 170 175

Ser Arg Ala Leu Glu Gly Lys Asp Ile Val Glu Gln Pro Cys Pro Asp  
180 185 190

Val Tyr Trp Phe Pro Leu Leu Ser Glu Gln Met Cys Asp Glu Leu Val  
195 200 205

Ala Glu Met Glu His Tyr Gly Gln Trp Ser Gly Gly Arg His Glu Asp  
210 215 220



Ser Arg Leu Ala Gly Gly Tyr Glu Asn Val Pro Thr Val Asp Xaa Pro  
 225 230 235 240

His Glu Ala Gly Gly Val Arg Gly Pro Val Ala Ala Ala Ala Ala Asp  
 245 250 255

Val Cys Gly Pro Met Thr Xaa Thr Cys Phe Arg Phe Thr  
 260 265

<210> 239  
 <211> 138  
 <212> PRT  
 <213> Homo sapien

<220>  
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 <223> X=any amino acid

<220>  
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 <222> (117)..(117)  
 <223> X=any amino acid

<400> 239

Xaa Phe Xaa Xaa Lys Gly Ile Phe Xaa His Leu Ser Tyr Gln His Glu  
 1 5 10 15

Phe Gly Arg Leu Leu Ala Thr Ser Arg Tyr Asp Thr Glu His Leu His  
 20 25 30

Pro Asp Leu Trp Gln Ile Phe Asp Asn Pro Val Asp Trp Lys Glu Gln  
 35 40 45

Tyr Ile His Glu Asn Tyr Ser Arg Ala Leu Glu Gly Lys Glu Ser Trp  
 50 55 60

Ser Ser His Ala Arg Thr Cys Thr Gly Ser His Cys Cys Gln Asn Lys  
 65 70 75 80

Cys Val Met Ser Trp Trp Gln Arg Trp Ser Thr Thr Ala Ser Gly Gln  
85 90 95

Ala Ala Gly Met Arg Ile Gln Gly Trp Leu Glu Ala Thr Arg Met Cys  
100 105 110

Pro Pro Trp Thr Xaa His Met Lys Gln Val Gly Tyr Glu Asp Gln Trp  
115 120 125

Leu Gln Leu Leu Arg Thr Tyr Val Gly Pro  
130 135

<210> 240  
<211> 233  
<212> PRT  
<213> Homo sapien

<400> 240

Met Lys Met Val Ala Pro Trp Thr Arg Phe Tyr Ser Asn Ser Cys Cys  
1 5 10 15

Leu Cys Cys His Val Arg Thr Gly Thr Ile Leu Leu Gly Val Trp Tyr  
20 25 30

Leu Ile Ile Asn Ala Val Val Leu Leu Ile Leu Leu Ser Ala Leu Ala  
35 40 45

Asp Pro Asp Gln Tyr Asn Phe Ser Ser Ser Glu Leu Gly Gly Asp Phe  
50 55 60

Glu Phe Met Asp Asp Ala Asn Met Cys Ile Ala Ile Ala Ile Ser Leu  
65 70 75 80

Leu Met Ile Leu Ile Cys Ala Met Ala Thr Tyr Gly Ala Tyr Lys Gln  
85 90 95

Arg Ala Ala Trp Ile Ile Pro Phe Phe Cys Tyr Gln Ile Phe Asp Phe  
100 105 110

Ala Leu Asn Met Leu Val Ala Ile Thr Val Leu Ile Tyr Pro Asn Ser  
115 120 125

Ile Gln Glu Tyr Ile Arg Gln Leu Pro Pro Asn Phe Pro Tyr Arg Asp  
130 135 140

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Asp Val Met Ser Val Asn Pro Thr Cys Leu Val Leu Ile Ile Leu Leu  
145 150 155 160

Phe Ile Ser Ile Ile Leu Thr Phe Lys Gly Tyr Leu Ile Ser Cys Val  
165 170 175

Trp Asn Cys Tyr Arg Tyr Ile Asn Gly Arg Asn Ser Ser Asp Val Leu  
180 185 190

Val Tyr Val Thr Ser Asn Asp Thr Thr Val Leu Leu Pro Pro Tyr Asp  
195 200 205

Asp Ala Thr Val Asn Gly Ala Cys Gln Gly Ala Pro Ala Pro Tyr Val  
210 215 220

Leu Pro Lys Pro Ser Ser Gly Arg Thr  
225 230

<210> 241  
<211> 319  
<212> PRT  
<213> Homo sapien

<220>  
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<223> X=any amino acid

<400> 241

Val Xaa Xaa Xaa Xaa Ser Pro Pro Leu Gln Pro Ser Pro Ser Glu Arg  
1 5 10 15

Arg Val Pro Thr Arg Gln Lys Leu Gly Ala Leu Gly Val Ser Arg Arg  
20 25 30

Gln Ala Arg Gly Arg Thr Gly Glu Arg Ala Gly Ser Arg Ser Gly Gly  
35 40 45

Gly Ala Gly Ser Ser Gly Ala Ala Gly Ser Arg Arg Gly Gly Leu Gln  
50 55 60

Ala Arg Arg Ser Thr Leu Leu Lys Thr Cys Ala Arg Ala Arg Ala Thr  
65 70 75 80

Ala Pro Gly Ala Met Lys Met Val Ala Pro Trp Thr Arg Phe Tyr Ser  
85 90 95

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Asn Ser Cys Cys Leu Cys Cys His Val Arg Thr Gly Thr Ile Leu Leu  
 100 105 110

Gly Val Trp Tyr Leu Ile Ile Asn Ala Val Val Leu Leu Ile Leu Leu  
 115 120 125

Ser Ala Leu Ala Asp Pro Asp Gln Tyr Asn Phe Ser Ser Ser Glu Leu  
 130 135 140

Gly Gly Asp Phe Glu Phe Met Asp Asp Ala Asn Met Cys Ile Ala Ile  
 145 150 155 160

Ala Ile Ser Leu Leu Met Ile Leu Ile Cys Ala Met Ala Thr Tyr Gly  
 165 170 175

Ala Tyr Lys Gln Arg Ala Ala Trp Ile Ile Pro Phe Phe Cys Tyr Gln  
 180 185 190

Ile Phe Asp Phe Ala Leu Asn Met Leu Val Ala Ile Thr Val Leu Ile  
 195 200 205

Tyr Pro Asn Ser Ile Gln Glu Tyr Ile Arg Gln Leu Pro Pro Asn Phe  
 210 215 220

Pro Tyr Arg Asp Asp Val Met Ser Val Asn Pro Thr Cys Leu Val Leu  
 225 230 235 240

Ile Ile Leu Leu Phe Ile Ser Ile Ile Leu Thr Phe Lys Gly Tyr Leu  
 245 250 255

Ile Ser Cys Val Trp Asn Cys Tyr Arg Tyr Ile Asn Gly Arg Asn Ser  
 260 265 270

Ser Asp Val Leu Val Tyr Val Thr Ser Asn Asp Thr Thr Val Leu Leu  
 275 280 285

Pro Pro Tyr Asp Asp Ala Thr Val Asn Gly Ala Cys Gln Gly Ala Pro  
 290 295 300

Ala Leu Thr Cys Cys Leu Ser Leu Gln Val Gly Gly Pro Glu Gly  
 305 310 315

<210> 242

<211> 76

<212> PRT

<213> Homo sapien

&lt;400&gt; 242

Met Asp Ser Ser Gly Ala Arg Ala Gly Thr Val Cys Thr Leu His Gly  
1 5 10 15

Ile His Arg Gly His Gln Lys Pro Gly Leu Phe Leu Ser Arg Ser Ser  
20 25 30

Asn Val Phe Ser Ser Asp Ser His His Leu Gln Leu Val Pro Thr Gln  
35 40 45

Cys Cys His Ser Arg Leu Thr Gln Val Leu Arg Pro Ser Thr Ser Ser  
50 55 60

Ala Ala Arg Ala His Leu Arg Leu Asp Cys Thr Ile  
65 70 75

&lt;210&gt; 243

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 243

Arg Ser Gly Cys Leu Ile Tyr Gly Leu Ala Leu Asp Ala Pro Ser Gly  
1 5 10 15

Arg Ser Val Met Asp Ser Ser Gly Ala Arg Ala Gly Thr Val Cys Thr  
20 25 30

Leu His Gly Ile His Arg Gly His Gln Lys Pro Gly Leu Phe Leu Ser  
35 40 45

Arg Ser Ser Asn Ala Ser Ala Ala Ile Ala Thr Thr Tyr Ser Ser Ser  
50 55 60

Pro His Ser Ala Ala Thr Ala Gly  
65 70

&lt;210&gt; 244

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 244

Met Gly Phe Ile Glu Ala Thr Arg Asn Gln Ala Phe Ser Cys Pro Glu  
1 5 10 15

Val Pro Ser Phe Ser Ser Asp Ser His His Leu Gln Leu Val Pro Thr

20 25 30

Gln Cys Cys His Ser Arg Leu Thr Gln Val Leu Arg Pro Ser Thr Ser  
35 40 45

Ser Ala Ala Arg Ala His Leu Arg Leu Asp Cys Thr Ile  
50 55 60

<210> 245  
<211> 57  
<212> PRT  
<213> Homo sapien

<400> 245

Arg Pro Pro Glu Thr Arg Pro Phe Leu Val Gln Lys Phe Gln Arg Phe  
1 5 10 15

Ser Ser Asp Ser His His Leu Gln Leu Val Pro Thr Gln Cys Cys His  
20 25 30

Ser Arg Leu Thr Gln Val Leu Arg Pro Ser Thr Ser Ser Ala Ala Arg  
35 40 45

Ala His Leu Arg Leu Asp Cys Thr Ile  
50 55

<210> 246  
<211> 267  
<212> PRT  
<213> Homo sapien

<220>  
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<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (267)..(267)  
<223> X=any amino acid

<400> 246

Ala Asp Glu Thr Ser Glu Lys Glu Gln Gln Glu Ala Ile Glu His Ile  
1 5 10 15

Asp Glu Val Gln Asn Glu Ile Asp Arg Leu Asn Glu Gln Ala Ser Glu  
20 25 30

Glu Ile Leu Lys Val Glu Gln Lys Tyr Asn Lys Leu Arg Gln Pro Phe  
           35                          40                          45

Val Gln Lys Arg Ser Glu Leu Ile Ala Lys Ile Pro Thr Phe Leu Gly  
       50                          55                          60

Asn Asn Ile Cys Gln Pro Ser Thr Ser Val Cys Thr Ala Leu Arg Glu  
   65                          70                          75                          80

Glu Asp Glu Glu Ala Leu His Tyr Leu Thr Arg Val Glu Val Thr Glu  
                           85                          90                          95

Phe Glu Asp Ile Lys Ser Gly Tyr Arg Ile Asp Phe Asp Phe Asp Gly  
                   100                          105                          110

Asn Pro Tyr Phe Glu Asn Lys Val Leu Ser Lys Glu Phe His Leu Asn  
           115                          120                          125

Glu Ser Gly Asp Pro Ser Ser Lys Ser Thr Glu Ile Lys Trp Lys Ser  
   130                          135                          140

Gly Lys Asp Leu Thr Lys Arg Ser Ser Gln Thr Gln Asn Lys Ala Ser  
  145                          150                          155                          160

Arg Lys Arg Gln His Glu Glu Pro Glu Ser Phe Phe Thr Trp Phe Thr  
                           165                          170                          175

Asp His Ser Asp Ala Gly Ala Asp Glu Leu Gly Glu Val Ile Lys Asp  
           180                          185                          190

Asp Ile Trp Pro Asn Pro Leu Gln Tyr Tyr Leu Val Pro Asp Met Asp  
       195                          200                          205

Asp Glu Glu Gly Glu Gly Glu Glu Asp Asp Asp Asp Asp Glu Glu Glu  
   210                          215                          220

Glu Gly Leu Glu Asp Ile Ala Lys Asn Gly Asp Glu Asp Glu Gly Asp  
  225                          230                          235                          240

Gly Met Met Lys Ile Asp Asp Glu Val Gly Gly Thr Glu Gln Gly Gly  
                           245                          250                          255

Leu Lys Lys Lys Phe Leu Xaa Xaa Pro Pro Xaa  
           260                          265

&lt;210&gt; 247

<211> 148  
<212> PRT  
<213> Homo sapien

<220>  
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<223> X=any amino acid

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<222> (17)..(17)  
<223> X=any amino acid

<220>  
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<223> X=any amino acid

<220>  
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<223> X=any amino acid

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<222> (138)..(139)  
<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (141)..(141)  
<223> X=any amino acid

<400> 247

Ser Phe Xaa Phe Asp Gly Asn Pro Tyr Phe Glu Asn Lys Val Leu Ser  
1 5 10 15

Xaa Glu Phe His Leu Asn Glu Ser Gly Asp Pro Ser Ser Lys Ser Thr  
20 25 30

Glu Ile Lys Trp Lys Ser Gly Lys Asp Leu Thr Lys Arg Ser Ser Gln  
35 40 45

Thr Gln Asn Lys Ala Ser Arg Lys Arg Gln His Glu Glu Pro Glu Ser  
50 55 60

Phe Phe Thr Trp Phe Thr Asp His Ser Asp Ala Gly Ala Asp Glu Leu  
65 70 75 80



Gly Glu Val Ile Lys Asp Asp Ile Trp Pro Asn Pro Leu Gln Tyr Tyr  
85 90 95

Leu Val Pro Asp Met Asp Asp Glu Glu Gly Glu Gly Glu Glu Asp Asp  
100 105 110

Asp Asp Asp Glu Glu Glu Glu Gly Leu Glu Asp Ile Ala Lys Lys Gly  
115 120 125

Met Arg Met Lys Val Xaa Lys Xaa Lys Xaa Xaa Met Xaa Trp Glu Glu  
130 135 140

Gly Gln Glu Asp  
145

<210> 248  
<211> 234  
<212> PRT  
<213> Homo sapien

<400> 248

Met Lys Met Val Ala Pro Trp Thr Arg Phe Tyr Ser Asn Ser Cys Cys  
1 5 10 15

Leu Cys Cys His Val Arg Thr Gly Thr Ile Leu Leu Gly Val Trp Tyr  
20 25 30

Leu Ile Ile Asn Ala Val Val Leu Leu Ile Leu Leu Ser Ala Leu Ala  
35 40 45

Asp Pro Asp Gln Tyr Asn Phe Ser Ser Ser Glu Leu Gly Gly Asp Phe  
50 55 60

Glu Phe Met Asp Asp Ala Lys Ile Leu Phe Asn Leu Ser Ala Asp Met  
65 70 75 80

Cys Ile Ala Ile Ala Ile Ser Leu Leu Met Ile Leu Ile Cys Ala Met  
85 90 95

Ala Thr Tyr Gly Ala Tyr Lys Gln Arg Ala Ala Trp Ile Ile Pro Phe  
100 105 110

Phe Cys Tyr Gln Ile Phe Asp Phe Ala Leu Asn Met Leu Val Ala Ile  
115 120 125

Thr Val Leu Ile Tyr Pro Asn Ser Ile Gln Glu Tyr Ile Arg Gln Leu

130                                      135                                      140  
 Pro Pro Asn Phe Pro Tyr Arg Asp Asp Val Met Ser Val Asn Pro Thr  
 145                                      150                                      155                                      160  
 Cys Leu Val Leu Ile Ile Leu Leu Phe Ile Ser Ile Ile Leu Thr Phe  
                                     165                                      170                                      175  
 Lys Gly Tyr Leu Ile Ser Cys Val Trp Asn Cys Tyr Arg Tyr Ile Asn  
                                     180                                      185                                      190  
 Gly Arg Asn Ser Ser Asp Val Leu Val Tyr Val Thr Ser Asn Asp Thr  
                                     195                                      200                                      205  
 Thr Val Leu Leu Pro Pro Tyr Asp Asp Ala Thr Val Asn Gly Ala Ala  
                                     210                                      215                                      220  
 Lys Glu Pro Pro Pro Pro Tyr Val Ser Ala  
 225                                      230

<210> 249  
 <211> 25  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Synthetic

<400> 249  
 ggccaactct ttttactcct tcatt

25

<210> 250  
 <211> 22  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Synthetic

<400> 250  
 caggagcatc tccgttttca tt

22

<210> 251  
 <211> 24  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Synthetic

<400> 251  
 tccagtagtt gggcagtgct ggca

24

<210> 252  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 252  
tcggcagaca tgtgcattg

19

<210> 253  
<211> 21  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 253  
cgttgcttgt acgctccgta a

21

<210> 254  
<211> 33  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 254  
cattgcgatt tctcttctca tgatcctgat atg

33